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IN THE

Supreme Court of the United States

OCTOBER TERM, 1972

No. 72-291

UNITED STATES FIRE INSURANCE CO.,

Petitioner,

against

MARINE SULPHUR TRANSPORT CORPORATION,
MARINE TRANSPORT LINES, INC.,

Respondents.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

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PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

TO THE HONORABLE THE CHIEF JUSTICE AND THE ASSOCIATE JUSTICES OF THE SUPREME COURT OF THE UNITED STATES:

Petitioner United States Fire Insurance Co. prays that this Court issue a writ of certiorari to review the judgment of the United States Court of Appeals for the Second Circuit entered in the above cause.

Opinions Below

The opinion of the Court of Appeals, which reversed the District Court in respect of petitioner, is reported at 460

F.2d 89 (1972). The full text of the opinion also appears in the Appendix hereto (1a).

The opinion of the District Court (Cannella, D.J.) is reported at 312 F. Supp. 1081 (1970). The full text of the opinion also appears in the Appendix hereto (29a).

Jurisdiction

The judgment sought to be reviewed is dated April 25, 1972 and was entered of record on April 25, 1972.

A petition for rehearing, timely filed by petitioner United States Fire Insurance Co., was denied on May 23, 1972.

A petition for rehearing *in banc,* timely filed by Marine Sulphur Transport Corporation and Marine Transport Lines, Inc. was denied on June 2, 1972.*

This being a civil case in admiralty, District Court jurisdiction was founded upon 28 U.S.C. § 1333(1).

The statutory provisions that confer jurisdiction upon this Court to review the judgment in question are 28 U.S.C. § 1254(1) and 28 U.S.C. § 2101(c).

Questions Presented for Review

1) Where a vessel is held to have been unseaworthy and there is a strong inference that the loss of the vessel was caused by unseaworthiness, does Sec. 4 of the Carriage

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* On July 11, 1972 counsel for Marine Sulphur Transport Corporation and Marine Transport Lines, Inc. forwarded to this Court the certified appendix in this case for use in connection with a petition for writ of certiorari to be filed by Marine Sulphur Transport Corporation, as owner, and Marine Transport Lines, Inc., as demise charterer of the MARINE SULPHUR QUEEN in respect of the death claimants. On July 10, 1972 the Clerk of the United States Court of Appeals for the Second Circuit forwarded to the Clerk of this Court the certified proceedings in this case.

of Goods by Sea Act (46 U.S.C. § 1304), which was incorporated into the contract of carriage, permit a Court of Appeals to adopt a rule relieving the private carrier from the burden of proving the exercise of due diligence to make the vessel seaworthy when the vessel disappears at sea in expectable weather with all hands and without precise explanation.

2) Does *Commercial Molasses Corp.* v. *New York Tank Barge Corp.*, 314 U.S. 104 (1941) which affirms in private carriage "the rule that the unexplained failure of the bailee to return the bailed goods is prima facie evidence of his breach of duty", permit a Court of Appeals to adopt a rule relieving the carrier from the duty of explanation of loss of the cargo when the vessel, which the Courts below found to be unseaworthy, disappeared at sea without precise explanation but under circumstances giving rise to a strong inference that the loss was caused by unseaworthiness.

3) Where a private contract of carriage includes an obligation to safely carry the cargo, subject to certain specific exceptions, does *Commercial Molasses Corp.* v. *New York Tank Barge Corp.*, 314 U.S. 104 (1941) permit a Court of Appeals to adopt a rule that exonerates the carrier from liability for the loss of the cargo where the carrier's unseaworthy vessel disappeared at sea under weather conditions to be expected and where the carrier failed to sustain its burden to bring the loss within a specific exception in the contract of carriage.

Statutory Provision Involved

The federal statute relevant to this petition is 46 U.S.C. § 1304.

Statement of the Case

This case involves the unexplained disappearance of the MARINE SULPHUR QUEEN with all hands in February, 1963, while on a voyage from Beaumont, Texas to Norfolk, Virginia.

The MARINE SULPHUR QUEEN, originally built as a T-2 type tanker in 1944, was converted in 1960 by Bethlehem Steel Corporation to carry molten sulphur. In January 1961 she commenced the carriage of molten sulphur pursuant to the terms of a 49 page Tanker Voyage Charter Party between Marine Transport Lines, Inc. and Texas Gulf Sulphur Co. On February 2, 1963 she sailed from Beaumont bound for Norfolk with 15,315 long tons of molten sulphur. She never arrived at Norfolk, and the Marine Board of Investigation convened by the United States Coast Guard concluded that the QUEEN and her entire crew "must be presumed lost" (30a).

The District Court, finding the vessel unseaworthy with the privity and knowledge of Marine Transport Lines, Inc., the demise charterer, and Marine Sulphur Transport Corp., the owner, denied their petition for exoneration from or limitation of liability and held that both were liable in full to the cargo and death claimants.* The District Court held that the impleaded Bethlehem Steel Corporation, which had converted the vessel in 1960, was liable to the death claimants but not the cargo claimant. The District Court further held that the weather conditions were expectable (41a); "that no one knows *how* the ship was lost" (42a); that the rule in the Second Circuit permits the presumption of causation and it may also encompass the existence of unseaworthiness (42a); and allowed the cargo claim against Marine Transport Lines, Inc. and Marine Sulphur Transport Corp. (49a).

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* Petitioner United States Fire Insurance Co. is the cargo claimant by subrogation (J.A. 3895a).

The Court of Appeals affirmed that Marine Transport Lines, Inc. and Marine Sulphur Transport Corp. were liable to the death claimants but reversed the District Court's allowance of the cargo claim against Marine Transport Lines, Inc. and Marine Sulphur Transport Corp. and the allowance of the death claims against Bethlehem Steel Corporation.

The Court of Appeals in its opinion states: "we accept the lower court's findings that the vessel was unseaworthy in several respects" (11a); "We can see no reason to disturb the lower court's findings of unseaworthiness" (12a); "that no one knows what caused the loss" (18a) and "MTL could show nothing at all about causation for the disappearance of the Queen" (19a); that "it is settled that when a vessel disappears in expectable weather under otherwise unknown circumstances, proof by the plaintiffs of some element of unseaworthiness will permit the trier of fact to infer that the unseaworthiness was the proximate cause of the loss" (15a); and that it read the cases cited in its opinion as permitting:

> "an inference of causation when an unseaworthy vessel disappears at sea in expectable weather but otherwise unknown circumstances as shifting the burden of production, but not the burden of persuasion, to the owners to demonstrate that the inference is unreasonable. *Cf. Commercial Molasses Corp.* v. *New York Tank Barge Corp.*, 314 U.S. 104, 110-13 (1941).
>
> As we accept the district court's findings of unseaworthiness, and the initial inference of causation drawn therefrom, we need only re-examine the evidence produced by the owners in an attempt to cast doubt on the reasonableness of the inference. Putting aside such improbable theories of cause as meteors or lightning, the only rebutting causal evidence of any force was the weather conditions.

> We agree with the trial court that the weather conditions at the time of the disappearance of the vessel were expectable." (16a);

and that

> "Because no cause for the loss of the Queen has been found, the legal burden of proof rule determines the cargo issue, as it did with the Death Claimants. That rule for the private carriage of goods is explicated in *Commercial Molasses Corp.* v. *New York Tank Barge Corp. supra*, which applies here unless a statute or an agreement between the parties changed the normal burden." (21a)

The Court of Appeals then turned to the charter party between Marine Transport Lines, Inc. and Texas Gulf Sulphur Co. (J.A. 3685a). This document specifies in clauses 1, 6, 23 and 28 that the vessel owner shall exercise due diligence to make the vessel seaworthy. Clause 1 refers to the vessel to be selected for conversion, the conversion contract and specifications and then provides as follows:

> "Owner shall man, victual, navigate, operate, fuel, supply and maintain the Vessel, and shall *exercise due diligence* to maintain the Vessel in class, *seaworthy* and fit for the carriage of cargoes hereunder for the term of this Charter Party." (Emphasis added)

Clause 6 of the charter party states:

> "6. Owner's Diligence. (a) Owner shall, *before and at the commencement of each voyage, exercise due diligence to make the Vessel seaworthy*, properly manned, equipped and supplied for and during the voyage, and to make the piping, pumps, vents and heating coils tight, staunch and strong and in every respect fit for the voyage, and to make the tanks, holds and other spaces in which cargo is carried fit and safe for its carriage and preservation. . . ." (Emphasis added)

The general exceptions clause (clause 23) of the charter party states that the owner will not be liable for

> "unseaworthiness of the Vessel whether existing at the beginning of the voyage or developing during the voyage *unless caused by want of due diligence* on the part of Owner to make the Vessel seaworthy or to have her properly manned, equipped, and supplied." (Emphasis added)

The burden of proof concerning the exercise of due diligence by the shipowner to make the vessel seaworthy is set forth in Clause 28 which incorporates Section 4 of the Carriage of Goods By Sea Act (46 U.S.C. § 1304). Section 4(1) states as follows:

> "Neither the carrier nor the ship shall be liable for loss or damage arising or resulting from unseaworthiness unless caused by want of due diligence on the part of the carrier to make the ship seaworthy, and to secure that the ship is properly manned, equipped, and supplied, and to make the holds, refrigerating and cool chambers, and all other parts of the ship in which goods are carried fit and safe for their reception, carriage, and preservation in accordance with the provisions of paragraph (1) of section 3. Whenever loss or damage has resulted from unseaworthiness, *the burden of proving the exercise of due diligence shall be on the carrier or other persons claiming exemption under this section.*". (Emphasis added)

Reasons for Allowing the Writ

I.

A writ of certiorari should be granted in this case because the Court of Appeals for the Second Circuit has rendered a decision on important questions of maritime law that is in conflict with Section 4(1) of the Carriage of

Goods by Sea Act (46 U.S.C. § 1304(1)) as incorporated in a private contract of carriage, and also in conflict with the decision of the United States Supreme Court in *Commercial Molasses Corp.* v. *New York Tank Barge Corp.*, 314 U.S. 104 (1941), which states the legal burden of proof rule for private carriage. The questions are important because a substantial amount of the maritime commerce of the United States is carried under private contracts of carriage (charter parties), e.g., almost all bulk petroleum products, ores and grains are carried under charter parties.

There is a warranty of seaworthiness by the vessel owner to the cargo. As stated in *The G. R. Crowe*, 287 Fed. 426 (S.D.N.Y. 1922):

> "All shipowners carrying goods by sea, whether common carriers or only bailees for transportation, are under an absolute warranty, implied by law, to furnish a vessel seaworthy at the beginning of the voyage. The Caledonia, 157 U.S. 124, 15 Sup. Ct. 537, 39 L.Ed. 644."

This principle was reaffirmed by this Court in 1941 in *Commercial Molasses, supra*, at page 110.

> ". . . the bailee of goods who has not assumed a common carrier's obligation is not an insurer. His undertaking is to exercise due care in the protection of the goods committed to his care and to perform the obligation of his contract *including the warranty of seaworthiness when he is a shipowner.*" (emphasis added)

The warranty of seaworthiness to cargo may be modified by contract as was accomplished in the Charter Party in this case i.e. the warranty of seaworthiness by the shipowner was reduced to an obligation to exercise due diligence to make the vessel seaworthy. However, it is the settled rule that "exceptions in a * * * charter party,

inserted by the shipowner for his own benefit, are unquestionably to be construed most strongly against him." *Compania de Navigacion La Flecha* v. *Brauer*, 168 U.S. 104, 118 (1897).

By incorporation of Section 4 of the Carriage of Goods by Sea Act in the charter party Marine Transport Lines, Inc. contractually undertook the burden of proving the exercise of due diligence when the loss results from unseaworthiness. There is proof of unseaworthiness and there is also an inference of unseaworthiness and causation. *South, Inc.* v. *Moran Towing & Trans. Co.* [*The Vega*], 360 F.2d 1002 (2d Cir. 1966) and *Federazione Italiana Dei Corszi Agrari* v. *Mandask Compania De Vapores, S.A.* [*The Perama*], 388 F.2d 434 (2d Cir.), cert. den. 393 U.S. 823 (1968) permit the inference of both unseaworthiness and causation as does this Court in *Commercial Molasses, supra*, at page 112:

> "Proof of the breach of warranty of seaworthiness stands on no different footing. The trier of fact may in many situations infer the breach from the unexplained circumstance that the vessel, whether a common *or private carrier*, sank in smooth water." (Emphasis added)

"In light of the fact that no one knows what caused the loss" and that "the only rebutting causal evidence of any force was the weather conditions" which were held to be expectable, how has the shipowner sustained the burden of proving the exercise of due diligence under the charter party and under Section 4(1) of the Carriage of Goods by Sea Act as incorporated? Neither court below held that due diligence was exercised by the owners. Moreover, the denial of limitation of liability on the ground of unseaworthiness with the privity and knowledge of the owners is tantamount to a finding of lack of due diligence. Nevertheless, the Court of Appeals denied recovery to cargo, a holding of extreme importance warranting review by this Court.

II.

Also involved in this case is "the rule that the unexplained failure of the bailee to return the bailed goods is prima facie evidence of his breach of duty". As said in *Commercial Molasses* (at pages 112-113):

> "This Court, in the case of private bailments, has given like effect to the rule that the unexplained failure of the bailee to return the bailed goods is prima facie evidence of his breach of duty, • • •; and the lower federal courts have applied, correctly we think the same rule with respect to proof of unseaworthiness by the shipper where the vessel has not assumed the obligation of a common carrier. • • • This is but a particular application of the doctrine of *res ipsa loquitur*, which similarly is an aid to the plaintiff in sustaining the burden of proving breach of the duty of due care but does not avoid the requirement that upon the whole case he must prove the breach by the preponderance of evidence."

Under the rule set down in *Commercial Molasses* the carrier must explain the loss. Both lower courts have held "that no one knows what caused the loss." The Court of Appeals further said: "Putting aside such improbable theories of cause as meteors or lightning, the only rebutting causal evidence of any force was the weather conditions • • • [which] were expectable."

Have Marine Transport Lines, Inc. and Marine Sulphur Transport Corp. explained the loss? The answer by both Courts below is clearly no! Accepting the principle in private carriage that once the cargo owner establishes a prima facie case the burden of production shifts but not the burden of persuasion, where does the case rest on the present state of the evidence?

In its opinion the Court of Appeals held that the shipper was "estopped" from recovery on any theory of improper design or structural failure. The Court referred to certain provisions of the charter party (25a-26a). It is submitted that these provisions relate primarily to approval by Texas Gulf Sulphur Co. of the cargo system and in particular the loading and discharging facilities in which Texas Gulf Sulphur Co. was particularly interested. In any event, agreement to accept the vessel initially under the charter party does not negate the other contractual provisions in the charter party that Marine Transport Lines, Inc. must exercise due diligence to make the vessel seaworthy. But putting that aside, *speculation* by the Court of Appeals about possible exceptions the shipowner might have had if more evidence were available is not a substitute for evidence.

The evidence simply stops at the point where the shipowner has the burden of production and the cargo owner has the benefit of a prima facie case and the inference that the loss was caused by unseaworthiness, a cause for which the shipowner is liable, which inference has not been rebutted. If no one knows what caused the loss, then the bailee has not explained the loss and the bailee should lose. As stated in *Commercial Molasses* (at page 113), "This is but a particular application of the doctrine of *res ipsa loquitur*". This Court further explained the bailor-bailee relationship and said at page 111:

> "the law takes into account the relative opportunity of the parties to know the fact in issue and to account for the loss which it is alleged is due to the breach. Since the bailee in general is in a better position than the bailor to know the cause of the loss and to show that it was one not involving the bailee's liability, the law lays on him the duty to come forward with the information available to him. • • • If the bailee fails, it leaves the trier of fact free to draw an inference unfavorable to him upon the bailor's establishing the unexplained failure to deliver the goods safely."

In *Commercial Molasses* the shipowner explained the loss and rebutted the inference to be drawn from the unexplained sinking. This Court said, at page 114:

> "To rebut the inference, respondent came forward with evidence fully disclosing the circumstances attending the sinking. Inspection of the barge before the loading began and after she sank, and again after she was raised, failed to disclose any persuasive evidence of unseaworthiness."

Clearly the Court of Appeals has created a new rule for private carriage—one that is much more stringent on the shipper-bailor. Thus it is extremely important to those involved in the private carriage of bulk cargoes that this Court reaffirm the rule set down in 1941 in *Commercial Molasses.*

III.

Also involved in this case is the rule that a carrier "must show that the loss was due to an excepted cause and not to breach of his duty to furnish a seaworthy vessel." In *Commercial Molasses* this Court held that a shipowner, in order to bring himself within a permitted exception to the obligation to carry safely, whether imposed by statute or because he is a common carrier, *or because he has assumed it by contract,* must show that the loss was due to an excepted cause, and not to breach of his duty to furnish a seaworthy vessel. The exact language by this Court is as follows (at page 109):

> "For this reason, the shipowner, in order to bring himself within a permitted exception to the obligation to carry safely, whether imposed by statute or because he is a common carrier *or because he has assumed it by contract,* must show that the loss was due to an excepted cause and not to breach of his duty to fur-

nish a seaworthy vessel. *The Edwin I. Morrison, supra,* 211; *The Majestic,* 166 U.S. 375; *Schnell* v. *The Vallescura, supra;* The *Beeche Dene,* 55 F.525. Cf. 39 Stat. 539, 49 U.S.C. § 88; Uniform Bill of Lading Act, § 12. See IX Wigmore on Evidence (3rd ed.) § 2508 and cases cited. And in that case, since the burden is on the shipowner, he does not sustain it, and the shipper must prevail if, upon the whole evidence, it remains doubtful whether the loss is within the exception. *The Folmina,* 212 U.S. 354, 363; *Schnell* v. *The Vallescura, supra,* 306, 307." (Emphasis added)

The contract in *Commercial Molasses* contained no exceptions. Essentially the carrier simply warranted that the barges were tight, staunch and strong. 314 U.S. 104 at 105. In the instant case the contract of carriage is a 49 page charter party requiring Marine Transport Lines, Inc. to carry the cargo safely, subject to *certain specific exceptions* generally listed in Clause 23, which is captioned the "General Exceptions Clause" (24a & J.A. 3704a).

Both Courts below held "that no one knows what caused the loss." Accordingly, Marine Transport Lines, Inc. and Marine Sulphur Transport Corp. have failed to "show that the loss was due to an excepted cause." Again, the Court of Appeals has created a new rule for private carriage to the prejudice of the shipper-bailor. The Court of Appeals has ruled that the shipowner need not "bring himself within a permitted exception to the obligation to carry safely" in spite of the rule in *Compania de Navigacion La Flecha* v. *Brauer,* 168 U.S. 104, 118 (1897) that "Exceptions in a charter party, inserted by the shipowner for his own benefit, are unquestionably to be construed most strongly against him". It is submitted, therefore, that this Court should reaffirm the rules set forth in *Compania de Navigacion* and *Commercial Molasses,* rules which are of great importance in maritime commerce.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that this petition for writ of certiorari should be granted.

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UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT

Nos. 457, 458, 459 and 460—September Term, 1971.

(Argued January 26, 1972 Decided April 25, 1972.)

Docket Nos. 35228, 35233, 35235 and 35247

In the Matter of the Vessel
MARINE SULPHUR QUEEN

MARINE SULPHUR TRANSPORT CORPORATION,

As Owner, Appellant,

and

MARINE TRANSPORT LINES, INC.,

As Demise Charterer, Appellant,

BETHLEHEM STEEL CORPORATION,

Impleaded Respondent-Appellant,

UNITED STATES FIRE INSURANCE CO.,

Cargo Claimant-Appellee and Appellant,

IDA RUTH HEARD, *et al.*,

Death Claimants-Appellees and Appellants.

Before:

FRIENDLY, *Chief Judge*,
ANDERSON, *Circuit Judge*, and BONSAL, *District Judge*.*

Appeal by shipowner and demise charterer from denial in admiralty of petitions for exoneration or limitation of liability to death and cargo claimants, and appeal by shipbuilder from judgment declaring its liability to death claimants and by cargo claimant from judgment dismissing its claim against shipbuilder and cross-appeal by death claimants from judgment dismissing their claim for punitive damages, in the United States District Court for the Southern District of New York, John M. Cannella, Judge.

Affirmed in part and reversed in part.

JOHN A. SULLIVAN, Esq., New York, N. Y. (Cadwalader, Wickersham & Taft, William S. Busch, Esq., and Fred R. Profeta, Jr., Esq., New York, N. Y., on the brief), *for Appellants Marine Sulphur Transport Corp. and Marine Transport Lines, Inc.*

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ANDERSON, *Circuit Judge:*

The *Marine Sulphur Queen* (the Queen), a converted T-2 tanker laden with a cargo of molten sulphur, left a pier at Beaumont, Texas, with pilot aboard at 1330 C.S.T. on February 2, 1963. At 1900 the pilot was dropped at Sabine Bar Seabuoy and the vessel continued on her course for Norfolk, Virginia, with her estimated time of arrival at noon E.S.T. on February 7th. At 0125 E.S.T. on February 4th a personal message from a crew member was received by R.C.A. This was the last word heard from

the ship or from anyone on it. Thereafter at 1123 an attempt was made to contact the Queen by R.C.A. radio but there was no response. At that time, had all gone well, the vessel's estimated position would have been roughly 100 nautical miles, on a bearing about West by South, from Key West, Florida. No radio distress message was ever received.

For the next nine days extensive air and surface searches were conducted for the vessel and her personnel. Nothing was found which could be identified with the vessel. Thereafter a second search was instituted and there were discovered eight life jackets, five life rings, two name boards, a shirt, a piece of an oar, a storm oil can, a gasoline can, a cone buoy and a foghorn, all of which were marked or identified as belonging to the lost vessel.

There was oil on some of the life jackets and life rings, but there were no traces of sulphur on any of the items; nor was there discovered any splintered or scorched debris or other evidence of fire or explosion. An underwater exploration was made by the Navy for the vessel's hulk, but without avail. Concentrated search operations were terminated on March 13.

After a thorough inquiry by a Marine Board of Investigation, convened by the Commandant of the United States Coast Guard, into all the circumstances of the ship's disappearance, it was concluded by the Board and the Commandant that, for an unknown and unascertainable cause, the Queen had gone to the bottom with the cargo, and the entire ship's company of 39 had been lost.

Claims were made by the representatives of the deceased crew members (Death Claimants) based upon the general maritime law relating to unseaworthiness of a vessel, under the Jones Act, 46 U.S.C. §688, and under Death on the High Seas Act, 46 U.S.C. §761, and also by United

States Fire Insurance Company (F.I.C.), based upon the Carriage of Goods by Sea Act, 46 U.S.C. §1300 *et seq.*, (COGSA), as insurer of the cargo shipped by Texas Gulf Sulphur Co., to whose claim F.I.C. was subrogated. Marine Sulphur Transport Corporation (MSTC), as shipowner, and Marine Transport Lines, Inc. (MTL), as demise charterer, petitioned for exoneration or limitation of liability pursuant to 46 U.S.C. §183, *et seq.* Later Bethlehem Steel Co. (Bethlehem), as the shipbuilder, and Texas Gulf Sulphur Co. (TGS) were impleaded as respondents.

At the trial voluminous evidence was presented covering the circumstances surrounding the acquisition of the Queen by MSTC, the arrangements for her conversion from a former oil tanker to a carrier of molten sulphur, the nature and details of the conversion, extensive expert testimony as to the effect of the structural changes on the operational condition of the ship as a molten sulphur carrier, the characteristics and hazards of the cargo and the history of the ship prior to the fatal voyage, including her 63 round-trip voyages as a molten sulphur carrier between January 18, 1961, when the Queen was certified by the Coast Guard for the carriage of Grade E liquids at elevated temperatures, and February 1, 1963, when she commenced taking on cargo for what proved to be her last voyage. There was evidence as to the quantity of this cargo and its stowage. The testimony also included statements by experts as to the possible causes for the loss of the vessel, cargo and crew. All of these elements of the case are described and discussed in the opinion of the district court, 312 F. Supp. 1081 (S.D.N.Y. 1970). For the purpose of this review a summary will suffice.

In April, 1960, TGS was desirous of making long term arrangements for the transportation of its molten sulphur. As a result of negotiations with MTL, the latter agreed

to cause its wholly owned subsidiary MSTC to purchase a 17 year old, T-2 oil tanker, *Esso New Haven*, to be converted into a molten sulphur carrier by Bethlehem at its Baltimore shipyard, in accordance with a contract, including plans and specifications, agreed upon by MTL and Bethlehem and approved by TGS. Charter parties were agreed upon in advance between MSTC, as shipowner, with MTL, demise charterer, and between MTL and TGS, as time charterer, for consecutive voyages for 12 charter years, commencing when the vessel was ready to load. Fundamental to this accord were MTL requirements that the cost of the conversion not exceed $1,650,000 and that the converted ship have a minimum cargo capacity of 15,100 long tons.

In due course the T-2 oil tanker was purchased and was delivered to the Bethlehem shipyard where her conversion went forward. The plans contemplated that the cargo, a minimum of 15,100 long tons of molten sulphur at 265° to 275°F., would be carried in a large tank in the hold of the vessel. This tank was 306′ long, 30′6″ wide and 33′ high, having a rectangular cross section. It had three internal sulphur-tight bulkheads which divided the tank into four sub-tanks. The Queen herself was an all welded T-2-SE-A1 tankship of 7,240 gross tons and 4,057 net tons, with a length of 504′, beam of 68.2′ and a depth of 39.2′. In order to accommodate the 306′ cargo tank it was necessary to remove the greater part of nine transverse bulkheads, i.e. those at frames 47 and 71 and the seven in between. It was also necessary to lower the floor of the ship which cut the transverse web frames down to 3′4″ above the flat keel plate. The center vertical keel was reduced to less than half its original height and the deck centerline girder was cut down slightly less than half its depth. The American Bureau of Shipping and the Coast Guard were not persuaded that the original conversion plan afforded

sufficient transverse strength to the vessel and they required that a full transverse bulkhead be included at frame 59, which was the center of the cargo tank and mid-ships of the Queen, and also ordered that provision be made for other strengthening factors. The loss of transverse strength from removal or reduction of the transverse bulkheads was sought to be compensated for by strategically placed whole or partial diaphragm bulkheads, the addition of substantial flange plates, transverse web frames at the bottom of the vessel and at the top, beneath the deck, and by welding the cargo tank from frame 58 to 60 to the five longitudinal girders of the ship which were under the cargo tank.

To allow for longitudinal expansion due to the intense heat of the cargo there were five longitudinal stringers attached to the bottom of the cargo tank to which were fitted flange plates which were bolted to the flange plates affixed to the ship's five longitudinal members. Between the flange plates there was inserted Phenolite, a laminated plastic, as a heat insulator. There were slots 3½" to 4" long in the insulation and in the flanges attached to the ship's longitudinals to allow for movement of the bolts. Likewise, above the tank there were slotted bolt connections with the centerline deck girder.

There were spaces on both sides of the length of the cargo tank which were approximately 15' in width between the sides of the tank and the sides of the ship. This area was partly taken up by wing tanks which were used for fuel, water or ballast, or left empty and the remainder, except for internal frame structures, gear and appurtenances, constituted the voids. The cargo tank was covered with a blanket of Owens-Corning Armaglas insulation which was 6" thick on top and 4" thick elsewhere. At the after ends of each of the four sub-tanks within the cargo tank there were port and starboard expansion trunks

which extended up through the weather deck into weather-tight pumphouses.

From each of the sub-tanks there was at the forward center a stream jacketed 6″ vent, which extended up through and about 3′ above the weather deck and ended in a U-bend. Also from each of the expansion trunks there was a steam jacketed 4″ vent which ran through the top of the pumphouse and terminated about 2′ above it in a U-bend. These were designed to carry off the hydrogen sulphide and carbon disulphide from the surface of the molten sulphur.

The Queen's Trim and Stability Booklet, approved by the Coast Guard, gave her optimum cargo capacity as 15,211 long tons. The district court found that on the voyage in question, though the ship's waterline was, on departure, below her Plimsoll mark, she carried 15,315 long tons of molten sulphur which completely filled her cargo tanks and overflowed into the expansion trunks. The court held that this over-filling of the cargo tanks was, under the circumstances, improper and dangerous. The 15,315 long tons figure was taken from the bill of lading and the weight certificate, and it was also the amount of the cargo claim for which the insurance company paid to TGS after the loss. MTL and MSTC argued that the correct figure was 15,260 long tons which the Coast Guard Board had assumed to be the cargo tonnage.

After the Queen was lost the United States Navy Oceanographic Office prepared a report on the weather which had prevailed between 2000 E.S.T. on February 3, 1963 to 1300 E.S.T. on February 4, for the waters lying between 80° W. and 82° W. There were generally northerly winds at a maximum of 25 knots with gusts to 46 knots. The maximum height of the waves was 16.5′. Because the entire weight of the cargo was confined to an area 30′ wide and centered over the keel rather than across the whole

68.2′ width of the vessel's hull, the radius of gyration of the ship was reduced; in other words, the arc of its roll was substantially shortened as compared with another vessel with the same metacentric height. The period of roll of the Queen was 8.5 seconds and, according to the Oceanographic Office report, the timing of the succession of waves was within 10% of the vessel's roll time.

The district court concluded that when the Queen left Beaumont, Texas, on her last voyage she was unseaworthy in several respects and "not reasonably suitable for her intended service." The court found the vessel as converted violated "the hundred-foot rule", §12(2), of the ABS "Rules for Building and Classing Steel Vessels," which were adopted as official regulations by the Coast Guard, 46 C.F.R. §31.10-1, and promulgated pursuant to 46 U.S.C. §391a(2), in that she was constructed with transverse bulkheads more than 100′ apart and MSTC and MTL were thus liable for statutory fault.

It also concluded that the conversion resulted in a substantial weakening of the transverse strength of the vessel, which was not made up for or replaced by the newly added diaphragm bulkheads, the fastenings of the cargo tank, the tank itself and the other internal structures, to the extent that the Queen was unable to cope with the racking stresses caused by the heavy seas on February 3 and 4, 1963 and that she could well have suffered a sudden and massive structural collapse.

The court further held that the Queen was unseaworthy because there was no provision for transverse and vertical thermal expansion and the resulting stresses; and because the center line concentration of the cargo weight reduced the ship's radius of gyration and its period of roll was faster than that of another vessel with the same metacentric height. She was also unseaworthy because the shear stress on the bottom transverse web frames tended to be

increased; because corrosive (and conceivably explosive) pieces and particles of sulphur coated most of the interior of the vessel surrounding the cargo tank; because there was no adequate system for warning the crew of the toxic and potentially explosive mixtures of hydrogen sulphide and carbon disulphide in the cargo tank and in the void spaces where there had been a history of frequent fires; and because the vents for carrying off these gases from the surface of the molten sulphur were ineffective due to the over-filling of the cargo sub-tanks and the overflow into the expansion trunks. As noted above, the court also found that the vessel was dangerously loaded.

The district court denied the petitions of MSTC and MTL for exoneration or limitation of liability; it granted recovery to the Death Claimants against MSTC, MTL and Bethlehem but denied them the recovery of punitive damages. It dismissed their claim against TGS and TGS's petition for exoneration or limitation—rulings which were not appealed. It granted F.I.C., as cargo claimant, recovery against MSTC and MTL but dismissed its claim against Bethlehem.

Although the Death Claimants invoked and the district court decided their claims on the authority of both the Jones Act and unseaworthiness, it is wholly unnecessary to consider the applicability of the Jones Act in this case where all of the decedents were lost in the line of duty on a ship at sea. Unseaworthiness as a basis for their claims against MSTC and MTL amply covers all conceivable interests of the claimants and the Jones Act can add nothing; any rights of the Death Claimants which are based upon negligence are subsumed by the recognition of their claim of liability without fault which flows from their showing unseaworthiness—subject, of course, to the issue of causation, which we discuss *infra*. G. Gilmore & C. Black, The Law of Admiralty, §6-25, at 295; §6-38, at 315-317 (1957).

The concept, design, conversion and operation of the *Marine Sulphur Queen* was an experiment in the interests of developing a new and more efficient means of delivering molten sulphur by sea. She was the first vessel of her kind. As an experiment there were new and relatively untried features in her construction which in the opinion of the experienced and capable shipbuilders and certifying officials should theoretically have produced a seaworthy ship. The ship's handling and carriage of molten sulphur were governed by instructions from the highly experienced shipper, and 63 successful voyages had been completed under a galaxy of varying conditions without serious loss. Yet the frequent fires in the cargo tank insulation and in the voids, the spillage of molten sulphur into the ship's bilge, the nature and characteristics of the gases, their potential for danger from toxicity and explosion, and the means of venting them out of the closed areas of the ship were not fully explained or understood. The owner, however, did not consider these problems to be dangerous or unmanageable, but, as indicated below, we accept the lower court's findings that the vessel was unseaworthy in several respects.

A Coast Guard naval engineer testified that the design and conversion of the Queen for the carrying of molten sulphur "was a calculated risk." It was largely the owner's experiment, to which the officers and men of the ship had been committed.

There was an abundance of evidence, as detailed above, covering the entire history of the Queen from the plans for her acquisition and conversion through her actual operation as a molten sulphur carrier. This basic factual material furnished the grist for the central contention in the case carried on through the testimony of experts who were, on the one side, of the opinion that the ship was sound and seaworthy in all respects and those who, on the other

side, were of the opinion that the vessel, as reconstructed and loaded at the time of her departure, was dangerous to the life and limb of the ship's company for several different reasons and was, therefore, unseaworthy. The district court concluded that the latter were correct and that the ship was unseaworthy in the several respects previously mentioned.

Although findings as to unseaworthiness and negligence are not, in this circuit, protected by the "unless clearly erroneous" test of F. R. Civ. P. 52(a), *Mamiye Bros.* v. *Barber Steamship Lines, Inc.*, 360 F.2d 774, 776-78 (2 Cir.), *cert. denied*, 385 U.S. 835 (1966), such findings are entitled to great weight and will ordinarily stand unless the lower court manifests an incorrect conception of the applicable law. *Cleary* v. *United States Lines Co.*, 411 F.2d 1009 (2 Cir. 1969). We can see no reason to disturb the lower court's findings of unseaworthiness.

The wrongful death claimants therefore sustained their burden of proving unseaworthiness and there remained only the issue of whether or not one or more of the conditions of unseaworthiness or some other agency caused the disaster. The court found in explicit terms that "no one knows how the ship was lost." The resolution of the question of liability will, under the circumstances, be determined by the allocation of the burden of proof on the causation issue, the existence of a rebuttable presumption and whether or not that presumption has been met.

Before discussing the matter of causation, mention must be made of the district court's holding that under the rule of *The Pennsylvania*, 86 U.S. 125, 136 (1874), the burden of proof rested on MSTC and MTL to show that the spacing of transverse bulkheads on the Queen more than 100′ apart could not have caused the losses, because the failure so to space the bulkheads made them guilty of negligence as a matter of law. This finding of statutory fault rests on what the court considered the violation of a statutory

standard embodied in the ABS "Rules for Building and Classing Steel Vessels" §12(2), *supra*, which required that "all vessels should have complete transverse bulkheads extending to the Strength Deck, spaced not over 100′ apart." The rest of §12(2), however, reads as follows:

> "... This should be accomplished by the fitting of substantial transverse 'tween deck bulkheads immediately over the main watertight bulkheads. Where this is impracticable, the transverse strength and stiffness of the hull is to be effectively maintained by deep webs or partial bulkheads."

Section 12(1) immediately preceding §12(2) reads as follows:

> "All vessels of ordinary type and normal form should be provided with strength and watertight bulkheads in accordance with this section; in vessels of special type where adherence to these rules is found to be impracticable, the arrangements will require to be specially approved."

It is obvious that the Queen was a "special type" vessel where strict and literal compliance with the provision for spacing transverse bulkheads 100′ apart was "impracticable." The Coast Guard, as the appropriate and authorized administrative agency, could and did ratify the arrangements for strength bulkheads which the ABS had specially approved. Sections 12(1) and (2) expressly provided for such modifications and substitutions by the ABS. The interpretation and application of the rule by the ABS and the Coast Guard were not unreasonable, arbitrary or capricious and, therefore, the district court was not in a position to declare that particular courses of conduct on the part of MSTC and MTL, which the administrative agency had held to be in compliance with its interpreta-

tion of the rule, was negligence as a matter of law, *see Udall* v. *Tallman*, 380 U.S. 1, 4 (1965).

The district court was also in error in applying the rule of *The Pennsylvania* in this instance because the provisions in §§12(1) and (2) do not delineate a precise and clearly defined duty, but rather call for interpretation and for judgment in their application, *Afran Transport Co.* v. *United States*, 435 F.2d 213, 219 (2 Cir. 1970), *cert. denied*, 40 U.S.L.W. 3166 (1971).

This is not to say, however, that a district court as a trier of fact is thereby barred from finding that the same acts or omissions have given rise to unseaworthiness in the vessel, *Schlichter* v. *Port Arthur Towing Co.*, 288 F.2d 801, 804-5 (5 Cir.), *cert. denied*, 368 U.S. 828 (1961).

Death Claimants against Owners

In accordance with general tort principles a crew member seeking damages against his employer, the owner, either under the maritime doctrine of unseaworthiness or under the Jones Act, has the burden of proving that the ship was unseaworthy or the owner negligent and also that such unseaworthiness or negligence was in fact a cause of his injury. And, just as the mere fact that the injury to the claimant occurred on the ship does not, in itself, establish unseaworthiness, *Mosley* v. *Cia. Mar. S.A.*, 314 F.2d 223, 229 (2 Cir.), *cert. denied*, 375 U.S. 829, 835 (1963); *Richter* v. *Mathiasen's Tanker Industries, Inc.*, 297 F.2d 494 (2 Cir. 1961), *cert. denied, sub nom., Pinto* v. *States Marine Corp.*, 369 U.S. 843 (1962), neither does proof of the fact of unseaworthiness, *ipso facto*, provide the proof of causation, *see, Grillea* v. *United States*, 229 F.2d 687, 689, *rev'd on other grounds*, 232 F.2d 919 (2 Cir. 1956); *Ramos* v. *Matson Navigation Co.*, 316 F.2d 128, 131 (9 Cir. 1963).

It is settled that when a vessel disappears in expectable weather under otherwise unknown circumstances, proof by the plaintiffs of some element of unseaworthiness will permit the trier of fact to infer that the unseaworthiness was the proximate cause of the loss. *Walston* v. *Lambertsen*, 329 F.2d 660, 662 (9 Cir. 1965), *cert. denied*, 293 U.S. 611 (1966) (dicta); *Admiral Towing Co.* v. *Woolen*, 290 F.2d 641, 649-51 (9 Cir. 1961); *Roth* v. *Bird*, 239 F.2d 257, 262 (5 Cir. 1956); *The Cleveco*, 154 F.2d 605, 615 (2 Cir. 1946). Although the lower court did not clearly state that it drew this inference of causation, we hold that its resolution of the liability of the owners to the Death Claimants subsumes such an inference. While the lower court may, to some extent, have relied on inappropriate authority for such an inference,[1] we see nothing in the lower court's opinion inconsistent with the conclusion that it drew the inference that the several aspects of unseaworthiness were, in their totality, the proximate cause of the Queen's disappearance, *Cf. Leather's Best, Inc.* v. *S.S. Mormaclynx*, 451 F.2d 800, 813 (2 Cir. 1971).

While most of the cases cited above which sanction the drawing of an inference of causation generally involve only

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1 The trial court in its opinion, 312 F. Supp. 1081, 1098, cited *Federazione Italiana Dei Corsi Agrari* v. *Mandask Compania DeVapores, S.A. (The Perama)*, 388 F.2d 434 (2 Cir.), *cert. denied* 393 U.S. 828 (1968); and *South, Inc.* v. *Moran Towing & Transportation Co. (The Vega)*, 360 F.2d 1002 (2 Cir. 1966), as standing for this proposition, but its reliance on them for the purpose was misplaced. Both are distinguishable from the present case. *The Perama* was carrying a cargo in foreign trade and came under the provisions of COGSA which were applied in the decision. The present case concerns private carriage between domestic ports to which neither COGSA or the Harter Act applies. *The Vega* was private carriage between domestic ports but it concerned a tow, the owner of which was suing the tug and its owner for loss of part of the tow—one of three ferryboats. The burden of proving the seaworthiness of the ferryboat was on the plaintiff-claimant. Under those circumstances his failure to prove seaworthiness resulted in the assumption that it must have been unseaworthy.

one aspect of unseaworthiness, *e.g.*, *Roth* v. *Bird*, *supra*, 239 F.2d at 262, we do not read them as prohibiting a similar inference when, as here, there are several aspects of unseaworthiness for all of which the defendant is responsible; to do so would produce an unjust and illogical result. It would deny the plaintiff who was able to prove that a vessel was unseaworthy in several respects an inference that would have been available to him had he only proved one aspect of unseaworthiness. Rather, as the list of unseaworthy aspects of the vessel grows longer, the inference becomes increasingly more reasonable that those aspects, as a group, were the proximate cause of the loss.

We read those cases permitting an inference of causation when an unseaworthy vessel disappears at sea in expectable weather but otherwise unknown circumstances as shifting the burden of production, but not the burden of persuasion, to the owners to demonstrate that the inference is unreasonable. *Cf. Commercial Molasses Corp.* v. *New York Tank Barge Corp.*, 314 U.S. 104, 110-13 (1941).

As we accept the district court's findings of unseaworthiness, and the initial inference of causation drawn therefrom, we need only reexamine the evidence produced by the owners in an attempt to cast doubt on the reasonableness of the inference. Putting aside such improbable theories of cause as meteors or lightning, the only rebutting causal evidence of any force was the weather conditions.

We agree with the trial court that the weather conditions at the time of the disappearance of the vessel were expectable. While there were strong winds and rough northerly seas during the early hours of February 4th, this was by no means extraordinary, nor did it represent a situation which a seaworthy ship could not have been reasonably expected to weather. As the District Court observed, some 24 ships reporting weather conditions for that date to the

Weather Bureau, sailed through the disturbed areas without incident. Texas Gulf Sulphur No. 1, a smaller vessel converted to transport molten sulphur, was sailing high and light toward Houston along a course somewhat paralleling, in the opposite direction, the probable course of the Queen. Her master testified that he had sailed through such winds many times without suffering damage, and that the obviously desirable condition for experiencing such weather was when the vessel was laden [as was the case of the Queen] rather than when she was light. See, *e.g.*, *The Cleveco, supra,* 154 F.2d at 615. An owner has a duty to provide a vessel that can withstand expectable weather, *Mitchell* v. *Trawler Racer, Inc.*, 362 U.S. 539, 550 (1960), and when a vessel goes down in such weather, a reasonable inference that proven aspects of unseaworthiness were the cause of the loss will stand. See, *e.g.*, *Sabine Towing Co.* v. *Brennan,* 72 F.2d 490, 493-94 (5 Cir.), *cert. denied,* 293 U.S. 611 (1934).

MTL, as the demise charterer, is the owner *pro hac vice* with all the responsibilities to the crew otherwise placed upon the shipowner, *see Bergan* v. *International Freighting Corp.*, 254 F.2d 231, 232 (2 Cir. 1958), and it is therefore liable as the owner here. On the other hand, an owner-demisor is generally only liable where the injury results from unseaworthiness or negligence which existed prior to the delivery of the vessel to the demise charterer. *Cannella* v. *Lykes Bros. S.S. Co.*, 174 F.2d 794, 796 (2 Cir.), *cert. denied,* 338 U.S. 859 (1949). Where, as here, the court inferred proximate cause from several aspects of unseaworthiness, some occurring prior to delivery of the vessel to MTL and some occurring after the delivery, we might appear to be faced with an insoluble problem whether MSTC, as owner-demisor, can properly be held liable to the Death Claimants. However, on the peculiar facts of this

case, we need not decide that interesting question. Where, as here, the owner-demisor is a wholly owned subsidiary of the charterer, the stock of which would clearly be available to satisfy the claims of the Death Claimants if MTL's other assets were insufficient, we see nothing which, as a practical matter, bars us from affirming liability as to MSTC. We emphasize that we do not decide whether in a case of unexplained disappearance where the owner-demisor is not a wholly owned subsidiary of the parent-demise charterer, the owner could properly be held liable when it was responsible for only some of a group of defects which, in their totality, were inferred to be the proximate cause of the loss.

In the absence of exoneration, MTL has petitioned for limitation of liability; however, in order to succeed, the burden is upon the owner to prove that the unseaworthiness was without its privity or knowledge, 46 U.S.C. §183(a); *Petition of Long*, 439 F.2d 109, 113-14 (2 Cir. 1971); *Moore-McCormack Lines, Inc.* v. *Armco Steel Corp.*, 272 F.2d 873, 876 (2 Cir. 1959), *cert. denied*, 362 U.S. 990 (1960); *see also Coryell* v. *Phipps*, 317 U.S. 406, 409 (1943). In light of the fact that no one knows what caused the loss, it is impossible for MTL to bear its burden, and, in addition, there was more than sufficient evidence to support the trial court's finding that MTL had failed in its task. In fact, MTL was in privity to all the elements of proven unseaworthiness because, through its highest officers, it was involved in and knowledgeable concerning the reconstruction of the ship, it knew the type of cargo that was being carried, and, through its master or agent, knew, or should have known, the condition of the vessel and how she was loaded prior to the commencement of her last voyage, *see* 46 U.S.C. §183(e). MTL need be in privity to only one of the several elements of unseaworthi-

ness which it could not show had anything to do with causing the loss. Because MTL could show nothing at all about causation for the disappearance of the Queen and her crew, the district court properly denied it limitation.

MSTC also petitioned for limitation of liability but, as its liability derives from its position as a wholly owned subsidiary of MTL, it is unnecessary to comment further on the denial of MSTC's petition, except that it is clear MSTC had privity and knowledge as to those aspects of unseaworthiness inherent in the reconstruction of the vessel. MSTC was a party to the conversion contract, dated August 9, 1960, which incorporated by reference the conversion plans of the Queen.

Death Claimants against Bethlehem

The Death Claimants argue that Bethlehem is also liable to them, because of the faulty design and reconstruction of the Queen. The shipbuilder, however, stands in a much different position vis-a-vis the lost seamen than the owner does, *Seas Shipping Co.* v. *Sieracki*, 328 U.S. 85, 89 (1946). The duty of providing the crew with a seaworthy ship runs only to the owner, and the shipbuilder neither employs the crew nor can he control what happens to the ship once it leaves his yard. Therefore, traditional tort concepts apply to the claim against Bethlehem[2] and, contrary to the trial court's conclusion, neither justice nor logic compel the application against it of the permissible inference rule from the unseaworthiness doctrine.

Assuming, without deciding, that Bethlehem was at fault, either under a negligence theory or under the doctrine of a manufacturer's duty of strict liability, it could not be

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2 The Death on the High Seas Act, 46 U.S.C. §761, in no way changes the burden of proof on tort claims.

made liable to the claimants here unless its wrongful conduct was a cause of the loss, 2 F. Harper & F. James, The Law of Torts, §20.2, at 1110 (1956); *see also, Montgomery* v. *Goodyear Aircraft Corp.*, 392 F.2d 777 (2 Cir.), *cert. denied*, 393 U.S. 841 (1968); *McDaniel* v. *The M/S Lisholt*, 282 F.2d 816, 818 (2 Cir. 1960), *cert. denied*, 365 U.S. 814 (1961). The burden of proving causation is on the plaintiff, *see, e.g., Lamb* v. *Interstate S.S. Co.*, 149 F.2d 914, 916 (6 Cir. 1945), and causation must be established under the doctrine of strict liability, as well as under ordinary negligence, *Basko* v. *Sterling Drug, Inc.*, 416 F.2d 417, 430-31 (2 Cir. 1969); *see also*, Restatement of the Law of Torts, Second, §402A, at 347-348 (1965).

The cause of the disaster which befell the Queen was found to be unknown. Of the possible causes considered, Bethlehem had no connection with those relating to the nature and handling of the cargo, such as corrosion and explosion. Because the Death Claimants have failed to prove that any fault on Bethlehem's part was a cause in fact of the loss, the claims against Bethlehem must be dismissed.

Cargo Claimants

The rules of law, both statutory and judicial, relating to cargo claims are quite distinct from those relating to the death and injury of seamen; therefore the claims of F.I.C. against the owners stand on an entirely different footing from the claims discussed above. F.I.C. has been subrogated to the claims of the cargo owner, TGS, and thus has exactly the same remedies against MTL which TGS would have had.[3] As Judge Brown said in *Isbell Enterprises Inc.* v. *Citizens Casualty Co.*, 431 F.2d 409,

3 Because of the decision on MTL's liability in regard to the cargo, there is no need to decide whether or not F.I.C. waived the right of subrogation in its contract with TGS.

417 (5 Cir. 1970), the subrogee insurance company "takes the Flotsam with the jetsam," *see also, American Surety Co.* v. *Bethlehem Bank*, 314 U.S. 314, 317 (1941).

Because no cause for the loss of the Queen has been found, the legal burden of proof rule determines the cargo issue, as it did with the Death Claimants. That rule for the private carriage of goods is explicated in *Commercial Molasses Corp.* v. *New York Tank Barge Corp., supra*, which applies here unless a statute or an agreement between the parties changed the normal burden.

Two statutes attempt, in various ways, to regulate the duties and liabilities of certain shippers and carriers, the Harter Act, 46 U.S.C. §190, et seq., and the Carriage of Goods by Sea Act, 46 U.S.C. §1300, et seq.; however, F.I.C. wisely makes no serious contention that either applies here of its own force. It has long been held that the Harter Act does not apply to private carriage, in which the Queen was engaged, *Koppers Connecticut Coke Co.* v. *James McWilliams Blue Line, Inc.*, 89 F.2d 865, 866 (2 Cir.), *cert. denied*, 302 U.S. 706 (1937); *The Westmoreland*, 86 F.2d 96, 97 (2 Cir. 1936); *The Fri*, 154 F. 333, 338 (2 Cir. 1907), *cert. denied*, 210 U.S. 431 (1908); *The Monarch of Nassau*, 155 F.2d 48 (5 Cir. 1946), and COGSA, which is concerned with bills of lading rather than charter parties, comes into play only in foreign commerce, in which, at the time of her loss, the Queen was not engaged, 46 U.S.C. §1300; *see also*, Gilmore and Black, *supra*, §3-25, at 126.

F.I.C. does argue, however, that TGS and MTL agreed to make COGSA, and its burden of proof rules, applicable to this private carriage, but, while they certainly could have made such an agreement, it is clear that they did not.

F.I.C. first contends that the charter party specifically incorporated COGSA in ¶1, ¶6, ¶23 and ¶28. These first three paragraphs, however, make no mention of COGSA

whatsoever, but simply use the phrase that the owner "shall exercise due diligence" to keep the vessel in a seaworthy condition—language roughly paralleling that contained in §4(1) of COGSA, 46 U.S.C. §1304(1). This mere similarity of rather common phrases does not invoke the entirety of COGSA, including its burden of proof rules, *cf. Pannell* v. *United States Line, Co.*, 263 F.2d 497, 498 (2 Cir.), cert. denied, 359 U.S. 1013 (1959).[4] While ¶28, captioned "Limitation of Liability" does provide that the owner shall have all "privileges, rights, and immunities as are contained in Sections 3(6), 4 and 11 of the Carriage of Goods by Sea Act," this too is not a general incorporation of COGSA, as the reference is limited to specific provisions of COGSA, favorable to the owner. When a statute is incorporated by reference, its terms become the terms of that part of the charter party, but limited incorporation does not trigger the entire Act, *Pannell, supra,* at 498; *see also, J. Aron & Co.* v. *The Askvin,* 267 F.2d 276 (2 Cir. 1959); *The Westermoreland, supra,* at 97.

F.I.C. also puts great emphasis on the argument that the Bill of Lading incorporates COGSA and that its provisions must take precedence over the terms of the charter party. The bill of lading provided for in the charter party, and issued upon the receipt of the sulphur in the present case, however, incorporated COGSA only in certain limited circumstances.[5] Even if those circumstances had occurred

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4 *Metropolitan Coal Co.* v. *Howard,* 155 F.2d 780, 782 (2 Cir. 1946), is inapposite here because the charter party in that case specifically incorporated the provisions of the Harter Act, and its burden of proof rules. Unfortunately, the case has sometimes been misread to apply burden of proof rules separate from those of the Harter Act, see, e.g., *Hampton Roads Carriers, Inc.* v. *Allied Chemical Corp.,* 329 F.2d 387, 391 (4 Cir.), *cert. denied,* 379 U.S. 839 (1964).

5 The pertinent portion of the Bill of Lading reads:

"This shipment is carried under and pursuant to the terms of the Tanker Voyage Charter Party dated as of April 8, 1960 at Jersey

COGSA would not regulate the terms of the contract of carriage between TGS and MTL.

A bill of lading may serve three functions: as a receipt, as a document of title, and as a contract for the carriage of goods; however, it does not perform this third function for the shipper and the carrier when there is a charter party containing the terms of the carriage contract. This point was made quite clear by this court in *The Fri, supra*, at 337:

> "The rule is that where there is a charter party the bill of lading operates as the receipt for the goods, and as a document of title passing the property of the goods, but not as varying the contract between the charterer and the shipowner."

See also, The G. R. Crowe, 293 F. 506, 508 (2 Cir. 1923), *cert. denied* 264 U.S. 586 (1924); *The Iona*, 80 F. 933 (5 Cir. 1897); *Ministry of Commerce* v. *Marine Tankers Corp.*, 194 F. Supp. 161, 162-63 (S.D.N.Y. 1960). The fact that the

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City, New Jersey, between MARINE TRANSPORT LINES, INC. and TEXAS GULF SULPHUR COMPANY, as Charterer, and all the terms, conditions and exceptions of said Charter except the rate and payment of freight specified therein apply to and govern the rights of the parties concerned in this shipment.

If this Bill of Lading is a document of title to which the Carriage of Goods by Sea Act of the United States, approved April 16, 1936, or similar legislation giving statutory effect to the International Convention for the Unification of Certain Rules relating to Bills of Lading at Brussels of August 25, 1924, applies by reason of the port of loading or discharge being in territory in which the said Act or other similar legislation is in force, this Bill of Lading shall have effect subject to the provisions of the said Act or other similar legislation, as the case may be, which shall be deemed incorporated herein, and nothing herein contained shall be deemed a surrender by the carrier of any of its rights or immunities or an increase of any of its responsibilities or liabilities under said Act or other similar legislation. If any term of this Bill of Lading is repugnant to the said Act or other similar legislation as so incorporated, such terms shall be void to that extent but no further."

parties intended this result is borne out quite clearly by ¶29 of the charter party which provides that any bill of lading "shall be without prejudice to the terms, conditions and exceptions of this Charter Party. . . ."

Therefore, in light of the fact that the ordinary burden of proof between a private shipper and carrier was not altered either by statute or contract, the rule of *Commercial Molasses, supra,* prevails. In that case, the Court held that the burden of proving a breach of the private carriage contract or of negligence by the bailee carrier was on the shipper. To be sure, the Court said that a shipper could make a *prima facie* case by simply establishing the loss of his goods and that the carrier then had a duty to come forward with information concerning the loss or risk a plaintiff's verdict, but it also clearly stated that if the trier of fact was left uncertain, the shipper had not met his burden,[6] *see also, Hampton Roads Carriers, Inc.* v. *Allied Chemical Corp.,* 329 F.2d 387, 391 (4 Cir.), *cert. denied,* 379 U.S. 839 (1964).

There is no doubt that the shipper, by F.I.C. its subrogee, has failed in its burden of proof. Under the general exceptions clause of the charter party, ¶23,[7] the owner or

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6 On occasion, the inferences permitted against the carrier by *Commercial Molasses Corp.* v. *New York Tank Barge Corp.,* 314 U.S. 104 (1941), have been misinterpreted actually to shift the burden of proof or "risk of non-persuasion." *Sweeney* v. *Erving,* 228 U.S. 233 (1913), relied upon by the Court in *Commercial Molasses,* at 113, makes quite plain that no such burden shifting was intended, *see also* C. McCormick, Evidence, §§307, 308, at 638-641 (1954).

7 ¶23(a) of the Charter Party reads as follows:

"23. *General Exceptions Clause.* (a) Neither the Vessel nor the master or Owner shall be or shall be held liable for any loss of or damage or delay to the cargo or for any failure in performing hereunder arising or resulting from:—Any act, neglect or default of the master, pilots, mariners or other servants of Owner in the navigation or management of the Vessel; barratry; fire, unless caused by the personal design or neglect of Owner; collision, strand-

carrier was not to be held liable for the loss of cargo on any account, unless it failed to exercise due diligence to make the ship seaworthy before she broke ground. Here, some of the possible causes of the loss are particularly exempted from owner liability, *e.g.*, fire, explosion, danger or accident of the sea, or neglect in the navigation of the vessel. Moreover, by retaining authority to approve the design, plans and specifications of the vessel, to inspect all steps in the work of conversion and to reject any equipment or components of the ship, and finally by accepting the vessel as delivered from Bethlehem, the shipper is estopped from recovery on any theory of improper design

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ing, perils, dangers or accidents of the seas or other navigable waters; saving or attempting to save life or property; wastage in weight or bulk or any loss or damage arising from inherent defect, quality or vice of the cargo; any act or omission of Charterer, shipper, consignee, owner of the goods or holder of the bill of lading, their agents and representatives; explosion, bursting of boilers, breakage of shafts or any latent defect in hull, machinery, equipment or appurtenances; unseaworthiness of the Vessel whether existing at the beginning of the voyage or developing during the voyage unless caused by want of due diligence on the part of Owner to make the Vessel seaworthy or to have her properly manned, equipped, and supplied; leakage; shrinkage; evaporation; change in quality of the cargo; handling or transportation losses; difference between actual or reported intake and outturn quantities; stowage or contact with or leakage from other cargo; discoloration; contamination; deterioration; any consequence arising out of shipping more than one grade of cargo; or from any other cause arising without the actual fault or privity of Owner. And neither the Vessel, her master or Owner, nor Charterer shall, unless otherwise in this Charter Party expressly provided, be responsible for any loss of or damage or delay to or failure to discharge or deliver the cargo arising or resulting from:—Act of God; act of war; act of public enemies; pirates or assailing thieves; arrest or restraint of princes, rulers or people; seizure under legal process provided bond is promptly furnished to release the Vessel or cargo; strikes, lockouts, stoppage or restraint of labor from whatever cause whether partial or general; or riot or civil commotion. No exemption afforded Charterer under this Clause shall relieve Charterer of or diminish its obligations for payment of any sums due Owner under other provisions of this Charter Party."

or structural failure or collapse, *see, Hampton Roads Carriers, supra,* at 392; *Alcoa Steamship Co.* v. *United States,* 94 F. Supp. 406, 407 (S.D.N.Y. 1950). But, in any event, in a case such as this, where the shipper was unable to prove that his loss was occasioned by some cause for which the carrier was liable, there can be no recovery.

As for the cargo claim against Bethlehem, it stands on no better ground than the death claims against the shipbuilder, which were dismissed for a failure to show that any fault on Bethlehem's part was a cause of the loss.

The Death Claimants have cross-appealed from the district court's denial of their motion for the imposition of punitive damages upon MTL, MSTC and Bethlehem. In view of our disposition of the claims for compensatory damages, Bethlehem is no longer concerned with this issue. As to the remaining parties, MTL and MSTC, we are satisfied that the trial court should be affirmed in its denial of punitive damages. A condition precedent to awarding them is a showing by the plaintiffs that the defendant was guilty of gross negligence, or actual malice or criminal indifference which is the equivalent of reckless and wanton misconduct. There is no evidence in this case to support a finding of any of these elements. *Lake Shore R. Co.* v. *Prentice,* 147 U.S. 101 (1893). Even if there were some evidence of this sort, the award of punitive damages is discretionary with the trial court. *The Amiable Nancy,* 16 U.S. (3 Wheat.) 546 (1818); *Precision Plating & Metal Finishing, Inc.* v. *Martin-Marietta Corp.,* 435 F.2d 1262 (5 Cir. 1970).

We affirm the denial of the petition of MTL and MSTC for exoneration or limitation of liability and affirm the allowance of the wrongful death claims against MTL and MSTC. We affirm the denial of the Death Claimants' motion for punitive damages and dismiss their cross-appeal on this point. We reverse the allowance of the wrong-

ful death claims against Bethlehem and order the dismissal of the action as to that respondent. We reverse the district court's allowance of the cargo claim of F.I.C. against MSTC and MTL and affirm the dismissal of its cargo claims against Bethlehem. Judgments may enter accordingly with costs as follows:

The Death Claimants may recover their costs against MTL and MSTC; Bethlehem may recover its costs against the Death Claimants; and MSTC, MTL and Bethlehem may recover their costs against the cargo claimant.

Cite as 312 F.Supp. 1081 (1970)

In the Matter of the Petition for Limitation of Liability of MARINE SULPHUR TRANSPORT CORPORATION, As Owner,

and

Marine Transport Lines, Inc., As Demise Charterer, of the VESSEL MARINE SULPHUR QUEEN.

In the Matter of the Petition for Limitation of Liability of TEXAS GULF SULPHUR COMPANY, As Alleged Owner or Demise Charterer, of the Vessel Marine Sulphur Queen.

Nos. 63 Ad. 237, 64 Ad. 769.

United States District Court, S. D. New York.

May 12, 1970.

Cadwalader, Wickersham & Taft, by John A. Sullivan, William S. Busch and Fred R. Profeta, Jr., New York City, for Marine Transport Lines, Inc., Marine Sulphur Transport Corporation and Texas Gulf Sulphur Co.

Cravath, Swaine & Moore, by Harold R. Medina, Jr., George J. Wade, David S. Cupps, and Arnold P. Messing, New York City, for Bethlehem Steel Corporation.

Bigham, Englar, Jones & Houston, by Douglas A. Jacobsen, Joseph J. Magrath, 3d, New York City, for United States Fire Ins. Co. and death claimant Martin.

Schwartz & O'Connell, by Donald E. Klein, Pressman & Scribner, by Frederick C. Stern, Standard, Weisberg, Heckerling & Rosow, by Jack Weinberger, New York City, Larry A. Roach, Lake Charles, La., Cooper, Ostrin, DeVarco & Ackerman, by Samuel Ackerman and Herbert DeVarco, Thomas M. Breen, New York City, Baker, Garber, Chazen & Duffy, by Bernard Chazen and George J. Duffy, Hoboken, N. J., Jack Steinman, New York City, of counsel, Fields, Rosen, McElligott & Auslander, by Thomas McElligott, Enrico S. San Filippo, New York City, Schneebaum & Blumenfeld, Brooklyn, N. Y., Lebovici & Safir, by Herbert Lebovici, Freedman, Borowsky & Lorry, Philadelphia, Pa., by Ned R. Phillips, New York City, for death claimants.

CANNELLA, District Judge.

The petition for exoneration from, or limitation of, liability made pursuant to 46 U.S.C. § 183 et seq. by the Marine Sulphur Transport Corporation as owner, and by Marine Transport Lines, Inc. as demise charterer, of the vessel Marine Sulphur Queen is denied, and the wrongful death claims are allowed. The wrongful death claims are also allowed against the impleaded respondent Bethlehem Steel Corporation as designer and converter of the Marine Sulphur Queen, but these claims as against the impleaded respondent Texas Gulf Sulphur Company are dismissed.

The "contingent" petition for exoneration from, or limitation of, liability made pursuant to 46 U.S.C. § 183 et seq. by the Texas Gulf Sulphur Company as alleged owner or demise charterer of the Marine Sulphur Queen is dismissed, and the claims herein against the Texas Gulf Sulphur Company are dismissed.

The cargo claim of the United States Fire Insurance Company is allowed against the Marine Sulphur Transport Corporation and Marine Transport Lines, Inc.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The claims referred to above arise out of the disappearance in the Gulf of Mexico on or about February 4, 1963 of the Marine Sulphur Queen [hereinafter "*Queen*" or "MSQ"], which had a crew of 39 and a full cargo of molten sulphur. The Marine Board of Investigation convened by the United States Coast Guard to investigate the disappearance conclud-

ed on August 23, 1963 that the *Queen* and her entire crew "must be presumed lost." [1] This court now finds that the MSQ and all her crew members and cargo were in fact lost on or about February 4, 1963.

1. Report of the Marine Board of Investigation to the Commandant of the U. S. Coast Guard, p. 26 (1963). This Report, which was introduced in evidence in its entirety as Claimants' Exhibit 24, was approved by the Commandant on March 17, 1964. The report setting forth this action was put into evidence as Claimants' Exhibit 25.

Pages 20-22 of the Marine Board's Report describe the extensive search that was conducted for the *Queen* as follows:

> • • • The first information that the MARINE SULPHUR QUEEN was overdue was received by the Commander, Fifth Coast Guard District at 2100 EST, 7 February 1963. This information was immediately sent to the Rescue Coordination Center, U. S. Coast Guard Commander Eastern Area in New York via "hot line." At 2145 EST the Eastern Area Rescue Coordination Center was called by a representative of the Marine Transport Lines, New York Office, reporting that the vessel was overdue, together with a description of the vessel. At 2218 EST, 7 February, the Commander Eastern Area initiated a communication check by an "All Ships Urgent Broadcast" which was repeated three times daily until 16 February 1963. At 2220 EST, 7 February, RCA Radio was contacted as to information on delivery of message to and from the vessel during the period 2-7 February, with the results previously stated.
>
> • • • Based on the above, a surface and air search was planned to commence at 0900 EST, 8 February providing that the communication check failed to locate the vessel. At 0138 EST, Coast Guard units in the 5th, 7th, and 8th Coast Guard Districts were alerted as to the search plan, and at 0800 EST when the communication check was negative, the search was commenced. The search comprised the following:
>
> 8 February—Day search—trackline from Beaumont through Florida Straits to Norfolk, a distance of 1630 miles. Seven aircraft were used in 72 flight hours, searching about 58,000 square miles. This trackline search covered 30 miles on either side of the vessel's estimated track.
>
> 8-9 February—Night search—three aircraft flew 23 flight hours and searched 22,000 square miles.
>
> 9 February—Day search—since vessel was not found along proposed track, a considerably expanded search plan was used. Nineteen aircraft flew 114 flight hours and searched 95,000 square miles.
>
> 9-10 February—Night search—two aircraft flew 12 flight hours and searched 8,300 square miles.
>
> 10 February—Day search—nineteen aircraft flew 136 flight hours and searched 76,700 square miles.
>
> 11 February—Day search—fourteen aircraft flew 86 flight hours and searched 55,000 square miles.
>
> 12 February—Day search—ten aircraft flew 42 flight hours and searched 22,000 square miles.
>
> 13 February—Day search—two aircraft flew 16 flight hours and searched 11,000 square miles.
>
> This concluded the initial search for the MARINE SULPHUR QUEEN. During the period 8-13 February 1963, Coast Guard, Navy, Marine Corps and Air Force aircraft participated in 83 sorties, flying 499.6 hours and searched a total of 348,400 square miles with negative results. Further efforts to locate the MARINE SULPHUR QUEEN during this initial search utilized the Coast Guard Atlantic Merchant Vessel Reporting system which located 42 vessels that could possibly have sighted the MARINE SULPHUR QUEEN on 4 and 5 February. All of these vessels were checked out by Coast Guard personnel with negative results. Several telephone calls were received by Coast Guard units during this initial search phase with information that the ship would be found in Cuba or in Puerto Rico. These leads were checked out by other Federal agencies with negative results.
>
> • • • On 20 February, a U. S. Navy torpedo retriever boat operating about 12 miles southwest of Key West, Florida sighted and picked up a fog horn and life jacket stencilled with the vessel's name. The second phase of the search for the MARINE SULPHUR QUEEN was then instituted, confined primarily to the area just west of Dry Tortugas Island, thence through the Straits of Florida, along the axis of the Gulf Stream, including the Bahamas Islands, and the east coast of Florida to Cape Canaveral. This search with seven ships and 48 aircraft sorties flying 271.4 hours covered an additional 59,803 square miles. The probability of

The court's jurisdiction is based on 46 U.S.C. § 185, on the Jones Act—46 U.S.C. § 688, and on 28 U.S.C. § 1333(1) with regard to the claim arising under the Carriage of Goods by Sea Act, 46 U.S.C. § 1300 *et seq.* Jurisdiction is also predicated upon the Death on the High Seas Act[2] since the court finds that the MSQ and crew were lost "beyond a marine league from the shore of any State." 46 U.S.C. § 761.

* * *

On April 28, 1960, a meeting took place between representatives of impleaded respondent Bethlehem Steel, a Pennsylvania corporation hereinafter referred to as "Bethlehem," and petitioner Marine Transport Lines, a Delaware corporation hereinafter referred to as "MTL." At the meeting, Bethlehem agreed in principle to convert a T-2 tankship to a molten sulphur carrier. Fundamental to this accord were MTL requirements that the cost of the conversion not exceed $1,650,000 and that the converted ship have a minimum cargo capacity of 15,100 long tons.[3] The latter requirement was part of a long-term tanker consecutive voyage charter party[4] executed as of April 8, 1960 between MTL and the impleaded respondent, "petitioner" Texas Gulf Sulphur Company, a Texas corporation hereinafter referred to as "TGS."

Subsequent to the reaching of the agreement, petitioner Marine Sulphur Transport Corporation, a Delaware corporation and wholly owned subsidiary of MTL [hereinafter "MSTC"], purchased from the Humble Oil Company the Esso New Haven,[5] an all welded T2-SE-A1 tanker of 7240 gross tons and 4057 net tons, with a length of 504 feet, breadth of 68.2 feet and depth of 39.2 feet. This ship was built in 1944 by the Sun Shipbuilding and Drydock Co. of Chester, Pennsylvania.

sighting during both search phases was computed to be 93% for a vessel, 70% for a metal lifeboat and 65% for a liferaft. The U. S. Navy conducted an underwater search for the vessel's hulk during the period of 20 February through 13 March in an area from the shoals to the 100 fathom curve between Key West and 24°35'N, 83°30'W, using six Navy vessels for 523 hours on the scene and 17 aircraft sorties flying 57 hours with possibility of detection of 80% for the hulk. During this period, additional debris was recovered and identified as coming from the MARINE SULPHUR QUEEN. At 1740 EST, 14 March 1963, having received negative reports from all participating units, the search for the vessel was discontinued.

* * * The material recovered and identified as from the MARINE SULPHUR QUEEN consisted of 8 life jackets, 5 life rings, 2 name boards, 1 shirt, 1 piece of an oar, 1 storm oil can, 1 gasoline can, 1 cone buoy, and 1 fog horn. This material was deposited with the Coast Guard at Miami, Florida and later shipped to Washington, D. C. where it was examined by experts from the Bureau of Standards, the Coast Guard, and the Bureau of Fisheries. The consensus of opinion was that possibly two life jackets had been worn by persons and that the shirt tied to a life jacket had also been worn by a person. Numerous tears on the life jackets indicated attack by predatory fish. Further examination was made of certain of the debris by the Federal Bureau of Investigation who determined that the shirt bore no laundry marks, visible or invisible, and that no trace of sulphur particles was evident on any of the material. Visual examination of the material disclosed no trace of either explosion or fire.

2. See generally Doyle v. Albatross Tanker Corp., 367 F.2d 465 (2d Cir. 1966).

3. See Report of Meeting—Marine Transport Line T2 Sulphur Carrier Conversion, signed by J. N. S[hrader] and dated April 29, 1960, p. 1 in Claimants' Exhibit 261. In addition to these fundamental requirements, the agreement was subject to certain preliminary conditions: (1) Approval of the plans and specifications by TGS. (2) Checking of the plans and specifications by George G. Sharp Co., Naval Architects & Engineers. (3) Finalization of a contract between MTL and TGS. (4) Final contract between MTL and Bethlehem. (5) Finalization of MTL's financing arrangements. See *id.*, p. 5.

4. Petitioners' Exhibit 17. See p. 3.

5. See Claimants' Exhibit 260.

The design of such T-2 tankers, however, had proven from the beginning to be unreliable, to say the least. In January, 1943, the Schenectady broke in two in port, and by July, 1946, a total of 15 T-2's had experienced Class I Casualties,[6] while numerous others had experienced lesser fractures. Indeed, a T-2 tanker, the Pine Ridge, broke up in December, 1960 while the Esso New Haven was still in the process of conversion at Bethlehem's Baltimore shipyard.[7]

The original concept of the T-2 design envisioned distribution of the cargo (petroleum) throughout the spaces, port to starboard. Nevertheless, the transformation of the Esso New Haven into the MSQ contemplated removal of the original T-2 centerline tanks and replacement of them with a single independent, sulphur-carrying tank, some 306 feet long, 30 feet, 6 inches wide and 33 feet high—such tank being internally divided by sulphur-tight transverse bulkheads into four tanks with No. 1 83 feet long, Nos. 2 and 3 73 feet long, and No. 4 77 feet. The remaining original wing tanks were to be used only for ballast. Pursuant to this basic concept, Bethlehem had drawn up Plan 43933, Alt.0[8] which it submitted in May, 1960 to MTL, TGS, the American Bureau of Shipping [hereinafter "ABS"][9] and the Coast Guard[10] for consideration. Installation of the 306-ft. tank necessitated, in effect, the gutting of the ship, and Plan 43933, Alt.0 accordingly provided, among other things, for the removal of nine transverse bulkheads located at frames 47, 50, 53, 56, 59, 62, 65, 68 and 71. There were not to be any complete or partial bulkheads connecting the structure of the cargo tank to the ship's structure. As agreed upon, MTL submitted this Plan to the George G. Sharp Co., which thereafter reported to MTL on May 17, 1960 as follows:

> A preliminary study of [Plan 43933, Alt.0] indicates the design to be deficient in transverse strength. All the main transverse bulkheads in the center tanks of the original tanker have been removed. *We believe it will be necessary to restore at least three of those bulkheads* and divide the sulphur tanks into two or three longitudinal tanks with cofferdams between. Longitudinal top and bottom girders and transverses in way of the sulphur tanks have been reduced below what is considered good practice. It may be possible to make up this deficiency by increased thickness of materials in these structural members, but this will require a detailed study. *Correction of the above deficiencies will result in the reduction of the specified cargo deadweight of from 3 to 5%.*[11]

As soon as it received this report, MTL forwarded a copy to Bethlehem with a cover letter stating:

> * * * The remarks contained [in this report] are quite disturbing to us; however, we feel that from our preliminary discussions you will be able to meet all necessary classifications and Coast Guard requirements in

6. See Final Report of a Board of Investigation (convened by order of the Secretary of the Navy) To Inquire Into the Design and Methods of Construction of Welded Steel Merchant Vessels [Claimants' Exhibit 343] 86-101 (1946). See also Trial Minutes, pp. 1139-45.

7. One method employed to reduce serious hull fractures on T-2 tankers was to strap the hull with "crack arresters", and the Esso New Haven apparently had been outfitted with eight such arresters.

8. See Claimants' Exhibit 304.

9. The ABS is a marine classification bureau entitled to recognition by agencies of the U.S. Government. See 46 U.S.C. § 881.

10. The Coast Guard is a branch of the armed forces of the United States with a primary responsibility to administer laws and promulgate and enforce regulations for the promotion of safety of life and property on the high seas and on waters subject to the jurisdiction of the United States. See 14 U.S.C. §§ 1, 2.

11. Emphasis added. Letter from Sharp Co. naval architect L. Hansen to Dr. C. Y. Chen of MTL. See Claimants' Exhibits 207B (Part I) and 304.

order that we may guarantee our Charterer [TGS] the specified deadweight carrying capacity of not less than 15,100 longtons of molten sulphur.[12]

A day earlier, on May 16th, J. N. Shrader of Bethlehem had encountered a similar negative reaction to Plan 43933, Alt.0 when he met with the ABS.[13] Thereafter, on May 20th, representatives of Bethlehem again met with the ABS. Bethlehem's "basic approach was to convince the Bureau that the sulphur tank, even though attached to the ship by bolted connections (plus being welded solid to the ship's structure at the tank's mid point) actually contributes a great deal of strength by becoming part of the ship's hull girder." [14] This "approach" was clearly dictated by the overriding economic concern that minimum cargo capacity not go below the specified 15,100 tons. In any event, the ABS acquiesced in this approach after the inclusion of certain features in the design.[15] Bethlehem then drew up its revised Plan 43933, Alt.1 [16] which retained the basic single tank structure, but which added a complete transverse bulkhead at frame 59 and diaphragm bulkheads at frames 53 and 65. Furthermore, the wing tank transverse bulkheads were to be aligned with the cargo tank's transverse bulkheads. This Plan was submitted to

12. Letter dated May 17, 1960 from Robert F. Rae to Ralph Leaf, Ass't Gen'l Mgr. of Bethlehem's Shipbuilding Division, in Claimants' Exhibit 267B (Part I).

13. Shrader reported on the meeting as follows:

> • • • Mr. Little and Mr. Foley [of the ABS] feel that our changes to the hull structure in the existing centerline cargo tanks are not adequate to maintain local transverse and longitudinal strength. Their initial thoughts are to retain three (3) complete transverse bulkheads, thereby making two cargo tank units instead of one, and to have deeper bottom and deck longitudinals than those presently proposed. These changes would necessarily reduce the cargo cubic available.
>
> I pointed out that the new tank foundations would assist in breaking the span of the bottom transverses and the cargo tank itself would, even though bolted, act to maintain rigidity. Mr. Little feels that this is not the case and since the tank is bolted with slip joints no credit can be given to it as far as strength is concerned.
>
> Upon being questioned about acceptability of an integral tank, as in our Proposition #2 to Marine Transport Lines, Mr. Little said that the Bureau would have no objection, although they would watch it very closely.
>
> Mr. Little said that the Bureau would take no further action on the structure until we have reviewed our design and talk to them again.

Report of Visit to American Bureau [sic] of Shipping New York Office, dated May 17, 1960, in Claimants' Exhibit 267B (Part I).

14. Marine Transport Lines T2 Sulphur Carrier Conversion—Report of Meeting, dated May 23, 1960, p. 1 in Claimants' Exhibit 267B (Part I).

15. a. "Transverse bulkhead 59 must be made tight all around the tank, thereby making (along with the welded portions of the foundation) the central anchorage point of the tank structure.

b. Provide partial unstiffened flat plate bulkheads outboard of the tank structure port and starboard at frames 53 and 65. These will act to transmit the tank and cargo weight into existing wing tank structure. This and item (a) above would also assist the hull structure by breaking up the span of the CVK.

c. To assist in supporting the tanks, provide bolted expansion connections port and starboard between the tank structure and ship's longitudinal bulkheads at frames 47, 50, 56, 62, 68, 71. Since transverse and vertical expansion are slight, these connections need allow only for longitudinal expansion.

d. Since the sulphur tank centerline swash bulkhead is to act as an extension of the CVK, additional supports (struts) must be provided between it and the tank's longitudinal stringers to make the bulkheads more rigid.

e. • • • all of the cut-outs in the bottom transverses (for longitudinal framing) will have to be plated over. Small openings at the bottom will be allowed for drainage."

Id., p. 2.

16. See Bethlehem's Exhibit A.

MTL, MSTC, TGS and the ABS and Coast Guard for consideration. There were no dissenters. On August 9, 1960, MSTC entered into a contract with Bethlehem for the conversion of the Esso New Haven into the MSQ,[17] and this process was completed by January 20, 1961.

Removal of the original centerline tanks and all of the transverse bulkheads in their way did not provide enough space, however, for installation of the 306-ft. tank, the cross section of which was rectangular. Additional structural reductions and/or alterations were required. The height of the center vertical keel from frames 46½ to 72½ was cut down from 7 feet, 6 inches to a constant height of 3 feet, 4 inches, and a 17 in. x 1 in. flange plate was welded to the top thereof. The transverse web frames, or floors, in the bottom of the ship were cut down to a constant horizontal plane of 3 feet, 4 inches above the flat keel plate and were fitted with 15 in. x 1 in. flange plates welded to the top thereof. On either side of the centerline vertical keel, the bottom longitudinals, 7 feet, 6 inches and 15 feet off the centerline, port and starboard, were extended up to this same 3 ft. 4 in. horizontal plane, by the addition of ½ inch plate with an 8 in. x 1 in. flange plate welded to the top. The bottom of the sulphur tank was fitted with five longitudinal stringers of ½ inch plate faced with 8 in. x 1 in. flanges. The longitudinals fitted to the bottom of the tank and the flange plates of the ship's bottom longitudinals were bolted together, except between frames 58 and 60, with a ½ inch thick, 8 in. wide phenolite laminated plastic installed between the flanges as a heat insulator. To permit longitudinal expansion and contraction of the tank, 1 inch bolts were mounted in 1⅛ in. holes in the tank longitudinals and passed through 1⅛ in. x 3½ in. slots in the insulator and the flanges in the ship's bottom longitudinals. Although not reflected in the conversion plan, these slots were increased in length to *four* inches for the last ten feet from either end of the tank. There was a single row of bolts on each of the outboard longitudinals and a double row on the centerline longitudinal. Between frames 58 and 60, a distance of 24 feet, 4 inches, the five longitudinals fitted to the bottom of the tank were welded to the ship's five bottom longitudinals after a plate ½ inch thick was inserted to compensate for the absence of the heat isolating material in these areas.

No precise measurements of the expansion were made during a subsequent test when air temperatures of 240° F. to 252° F. were achieved inside the *empty* tank,[18] but one witness recalled that the ends of the tank had expanded so that the bolts were within ¼ to ⅜ of an inch from the ends of the 4 in. slots. Apparently, no measurements of the expansion were ever made while the tank was full of molten sulphur. During the one test and later at various times while the vessel was in operation, loud noises caused by expansion and contraction of the tank were heard throughout the vessel.[19]

As was required below the tank, the ship's structural members also had to be cut above the tank in order to provide the requisite space. Under the weather deck, the centerline deck longitudinal girder was reduced from its original depth of 5 feet to 2 feet, 8 inches, except between frames 58 to 60 where the original depth was 3 feet, 6 inches. This section was welded directly to the top of the tank. Where this girder was cut to a depth of 2 feet, 8 inches, a 15 in. x 1 in. face flange was welded to the bottom thereof. On the top of the tank at the centerline, bracketed webs ½ inch thick with face plates 8 inches by 1 inch by 12 inches long were fitted at

17. Petitioners' Exhibit 16.

18. The tank had been fitted with steam heating coils in its bottom, sumps, sides and ends.

19. See Claimants' Exhibit 24 at p. 4.

each frame between frames 47 to 71 inclusive except for the welded portion between frames 58 to 60. Again the slotted bolt arrangement was employed, with each connection being made with two bolts staggered on either side of the centerline of the girder.

In summary then, the cargo tank was attached at the bottom to five longitudinal girders and at the top to the centerline deck girder by means of slotted bolts. This unique arrangement was the subject of much expert testimony and criticism and was attacked as to its basic ability to hold in place a tank and cargo of the size and weight specified when the ship worked in a heavy sea.

Continuing with the features of the conversion, a complete watertight bulkhead surrounded the tank at frame 59 so that a void space then existed fore and aft of this bulkhead. Diaphragm plates were fitted between the tank sides and the wing tank longitudinal bulkhead at frames 53 and 65, both on the port and starboard sides. These diaphragm plates were not watertight. They extended from 4 feet, 6 inches above the tank bottom to within 1 foot, 6 inches of the top of the tank. At about the 20 ft. level above the tank bottom, 13 in. x 36 in. access holes, port and starboard, were cut out of the diaphragm plates to permit access along a cat walk, which together with appropriate vertical ladders, permitted personnel to descend from the weather deck to the void space surrounding the tank.[20] On each side of the tank, tank expansion connections consisting of two pieces, one welded to the tank and the other to the wing tank longitudinal bulkhead, were fitted at frames 47, 50, 56, 62, 68 and 71.

As noted previously, the cargo tank was divided internally into four separate cargotight areas. Each of these four sub-tanks was fitted at the after end with port and starboard expansion trunks which extended through the weather deck into watertight pumphouses.

To reduce thermal losses, the entire tank exterior was insulated with a blanket of Owens-Corning Armaglas PF-335, 4 inches thick on the bottom, sides, ends and around the expansion trunks and 6 inches thick on the top.

* * *

The *Queen* was certificated at Baltimore by the Coast Guard on January 18, 1961 for the carriage of "Grade E liquids at elevated temperatures." She was then put in service transporting molten sulphur from TGS's main storage and loading terminal at Beaumont, Texas to molten sulphur terminals at Carteret, New Jersey and Norfolk, Virginia, as well as other Gulf and East coast ports on occasion. The vessel, which had an estimated life expectancy (by MTL) of 15 years, made only 63 voyages after conversion and prior to February 1, 1963. On that date, loading of molten sulphur[21] commenced at Beaumont. Some 7,825 long tons of dark sulphur were pumped into "tanks" 1 and 2; bright sulphur weiging 7,487 tons was pumped into "tanks" 3 and 4. Total load: 15,315 long tons.[22] In addition to this cargo, the MSQ had on board 3,830 barrels of fuel and 100 tons of water[23] at the time of departure from Beaumont, 1330 hours (CST) on February 2, 1963. She proceeded to sea under the direction of a pilot, who left the vessel at the Sabine Bar Sea Buoy. Shortly thereafter, Captain James V. Fanning, master of the *Queen*, radioed that the ship had departed the buoy at 1900 CST (on February 2d) via 24.4°N 83.0°W to 24.8°N 80.2°W

20. The void space was approximately two feet wide at the sides of the tank, three feet at the top and six feet at the ends.

21. The temperature of the sulphur was between 273° and 278° F.

22. The court accepts this figure, which is set forth in both the bill of lading and the weight certificate (Cargo Claimant's Exhibits B and C), for purposes of the cargo claim as opposed to the ship's figure of 15,260 tons.

23. The draft in fresh water was 29 feet, 11 inches forward and 32 feet, 9 inches aft.

to 31.2°N 79.2°W to 35.1°N 79.3°W to Cape Henry, Virginia, with an estimated time of arrival at Norfolk of 12 noon (EST) on February 7th. Captain Fanning had been instructed to give both a 48 hour and a 24 hour advance notice of arrival to the Norfolk agent. No such messages were ever received. The only other (and last known) message from the MSQ was a personal one from a member of the crew which was transmitted at 1:25 a. m. (EST) on February 4th and received by RCA Radio. At this time, the estimated position of the ship was 25°45'N 86°W based on an estimated speed of 14.5 knots. RCA made two unsuccessful attempts to contact the *Queen*, the first commencing at 11:23 a. m. (EST) on February 4th. At that time, the vessel would have been at an estimated position of 24°40'N 83°19'W if she had continued along.

The hindcast prepared by the United States Navy Oceanographic Office on the weather conditions prevailing along the projected track of the MSQ during the period of 2000 hours (EST) on February 3 to 1300 hours (EST) on February 4 for the area between 88°W and 82°W indicates that the ship may have encountered seas with a maximum wave height of 16.5 feet slightly abaft the port beam. The winds would have been generally northerly in direction, also slightly abaft the port beam, with a maximum force of 25 knots and gusting to 46 knots. The vessel's period of roll was calculated to have been 8.5 seconds. The period of the waves was included in the hindcast and was within ten percent of the MSQ's period of roll.

As with most, if not all, tragic and seemingly esoteric happenings, the loss of the *Queen* has precipitated a rash of theories incorporating both physics and metaphysics in varying degrees. The two petitions herein were filed on March 1, 1963 and July 9, 1964.[24]

[1, 2] In a proceeding for exoneration from, or limitation of, liability, the petitioners are required to prove that the given ship, in this case the *Queen*, was seaworthy when she broke ground and to set forth facts known to them which might have a bearing on the cause of the loss. The claimants have the burden of proof of establishing either unseaworthiness or negligence, and if they do this,[25] the petitioners must then show that they are entitled to limitation because of a lack of privity or knowledge as to the condition of unseaworthiness or negligence. See Petition of Moore-McCormack Lines, Inc., 147 F.Supp. 816 *passim* (S.D.N.Y.1956); Petition of Long, 293 F.Supp. 172, 173-174 (S.D.N.Y.1968). See also Petition of the United States, 303 F.Supp. 1282, 1302-1303 (E.D.N.C.1969); Pre-Trial Order herein, page 4.

[3] The burden of proof with regard to the impleaded respondents Bethlehem and TGS is on the death claimants.

[4, 5] Once it is prima facie that a cargo delivered on board as attested to in a bill of lading is lost, which is the case herein, the "carrier" is required to prove that it exercised due diligence to make the ship seaworthy or that the loss was the result of a cause excepted from liability by the Carriage of Goods by Sea Act [hereinafter "Cogsa"]. See, e. g., Lekas & Drivas, Inc. v. Goulandris, 306 F.2d 428, 429 (2d Cir. 1962). In this case, however, petitioners raise a threshold issue of whether the cargo claimant, the United States Fire Insurance Company—a New York corporation hereinafter referred to as "FIC", is entitled to subrogation under its ocean marine cargo insurance policy with TGS[26] and/or "subrogation receipt" dated

24. While denying that it is an "owner" within the meaning of the Limitation of Liability Act, TGS filed its petition in the event that the court were to find otherwise.

25. Failure to carry this burden would entitle petitioners to exoneration.

26. Cargo Claimant's Exhibit D.

March 4, 1963.[27] The burden of proof with regard to this issue is on FIC.

A trial was held on the sole issue of liability with petitioners MSTC, as owner, and MTL, as demise or bareboat charterer,[28] presenting evidence in an attempt to substantiate their contentions that the MSQ was seaworthy in all respects; that the vessel's loss and the resulting loss of her crew and cargo were not caused or contributed to by any fault or neglect on their part, but rather by a peril of the sea or act of God; and that they lacked privity or knowledge with respect to any fault or neglect.

Zeroing in on the death claimants' basic contentions[29] by reducing the choke on their shotgun, they argue that TGS was a joint venturer with MTL and MSTC and therefore must also stand in the same position as those two petitioners; that the plan concocted by Bethlehem at the behest of MTL to convert a wasted T-2 tanker into a carrier of TGS's exotic cargo was negligent both in concept and implementation, for which TGS and Bethlehem are liable; that TGS and Bethlehem are liable for breach of an implied warranty of fitness and suitability and under the concept of strict tort liability; and that the MSQ was negligently maintained and operated by the petitioners (including TGS) and Bethlehem. The death claimants further contend that the *Queen* must be presumed to have been unseaworthy by virtue of its otherwise unexplained loss under conditions of wind and sea which she was designed to meet; that there was statutory fault requiring application of the *Pennsylvania* Rule; and that the MSQ was unseaworthy due to structural weakness and to a number of dangerous conditions inherent in the design and purpose of the conversion.[30] The death claimants argue that the petitioners are not entitled to exoneration due to a failure to prove that the MSQ was seaworthy in all respects and that the petitioners are not entitled to limitation of liability because they were privy to the negligence and unseaworthiness which caused the loss of the vessel.

The essential points of TGS's defense as impleaded respondent are that it was not a joint venturer with MSTC-MTL, but only a voyage charterer of their vessel; that its cargo was one which is relatively safe to store, handle and carry; and that the loss of the MSQ and her crew and cargo was not caused by negligence or want of care on its part, but rather by a condition or cause unknown to TGS.

Bethlehem argues that it carried out the conversion in conformity with the best commercial marine practices and with a plan approved by the owner and charterer of the vessel; that the design was approved by the ABS and Coast Guard, which granted the MSQ a certificate; and that the cause of the loss of the ship is utterly unknown but could have been any one of a number of natural phenomena including a meteorite or tsunami or "freak sea." Bethlehem further contends that it is not liable in the absence of any showing of negligence on its part which proximately caused the loss and that the doctrines of res ipsa loquitur and strict tort liability do not apply to it in this case.

* * *

The evidence in this case makes it abundantly clear, and the court so finds,

27. Cargo Claimant's Exhibit A. On that date, FIC indemnified TGS for the loss of its cargo in the amount of $428,820.

28. See Petitioners' Exhibit 23.

29. Essentially similar arguments are made by FIC.

30. Death claimants allege, for example, that there was a continual potential for explosion in that two explosive gases—hydrogen sulphide and carbon disulphide—which tend to be liberated from molten sulphur, especially when it is agitated, and explosive sulphur dust permeated the void spaces due to an inadequate ventilation system and that the resultant gaseous mixtures were susceptible to ignition at any time by recurring fires on the surface of the molten sulphur and in the insulation surrounding the tank.

that petitioners MSTC and MTL have failed to sustain their initial burden of proving that the MSQ was seaworthy when she departed Beaumont on February 2, 1963. The court makes the following specific determinations:

I.

As part of its responsibility "for the promotion of safety of life and property on the high seas and on waters subject to the jurisdiction of the United States," the Coast Guard is required to certify that the hull of a given vessel "is of a structure suitable for the service in which she is to be employed." 46 U.S.C. § 391(b). The Coast Guard has promulgated rules and regulations for tank vessels [31] pursuant to Section 391a(2) of Title 46, U.S.C., which provides, in part:

> In establishing such rules and regulations the Commandant of the Coast Guard may adopt rules of the American Bureau of Shipping or similar American classification society for classed vessels insofar as such rules pertain to the efficiency of hulls and the reliability of machinery of vessels to which this section applies.[32]

Section 31.10–1 of Title 46, C.F.R. reads as follows:

> • • • (a) In the inspection of hulls, boilers, and machinery, the current standards established by the American Bureau of Shipping and designated "Rules for Building and Classing Steel Vessels" respecting material and construction of hulls, boilers, and machinery, except as otherwise provided for by law and regulations in this chapter, shall be accepted as standard by the Coast Guard.
>
> (b) The current standards established by the American Bureau of Shipping in effect at the time of construction of the vessel, or otherwise as applicable, shall be used. The book "Rules for Building and Classing Steel Vessels" is usually published annually • • •
>
> (c) The approved plans and certificate of the American Bureau of Shipping, or other recognized classification society for classed vessels, may be accepted by the Coast Guard as evidence of the structural efficiency of the hull and reliability of machinery of vessels subject to the regulations in this subchapter, except as otherwise provided for by laws and regulations in this chapter.

The foregoing provisions make it clear that ABS standards and rules are entitled to, and do have, statutory effect.

The ABS standard in 1959–60 with regard to strength bulkheads was that "[a]ll vessels should have *complete* transverse bulkheads extending to the Strength Deck, spaced not over 100 feet apart." [33] A number of witnesses, including Edward P. Rahe of Bethlehem's Shipbuilding Division, recognized this 100-ft. rule as the standard for the spacing of transverse bulkheads. Indeed, prior to conversion, the distance between complete transverse bulkheads in the Esso New Haven was 36 feet, 6 inches. After conversion, the MSQ had one transverse bulkhead at frame 59. This bulkhead was some 159 feet from the next complete bulkhead forward and 150 feet from the next complete one aft. The court finds that the diaphragm bulkheads installed at frames 53 and 65 in no way qualified as "complete transverse bulkheads."

Although the ABS approved the bulkhead arrangement of Plan 43933, Alt.1,[34] the court finds that the ABS should have adhered to its initial reaction to the

31. See generally Subchapter D of Title 46, C.F.R.

32. See also 46 U.S.C. § 369(b).

33. Emphasis added. ABS, Rules for Building and Classing Steel Vessels [Claimants' Exhibit 302] 33 (1959); ABS, Rules for Building and Classing Steel Vessels [Claimants' Exhibit 362A] 35 (1960).

34. The Coast Guard had, as usual, predicated its approval on ABS acceptance. See Claimants' Exhibit 24 at pp. 35–36.

conversion, namely, that there be at least three complete transverse bulkheads,[35] and that by not doing so, the ABS violated its own rule. It is true that this rule further provides that where "spaced not over 100 feet apart . . . is impracticable, the transverse strength and stiffness of the hull is to be effectively maintained by deep webs or partial bulkheads," and the ABS apparently relied on this provision in approving the diaphragm plates. But the court finds that installation of at least three complete transverse bulkheads was not impracticable[36] and that the transverse strength and stiffness of the T-2 hull were not maintained by the cutting down of the web frames and the installation of the diaphragm bulkheads.

Traditional practice has apparently been for the Coast Guard to adhere to the ABS rules and regulations regarding hull structure, and the court therefore finds that this adherence gives the 100-ft. rule statutory effect. But even if there were no such adherence, the court finds in view of all the expert testimony in this case that this rule should be followed as a rule of thumb. "Courts must in the end say what is required; there are precautions so imperative that even their universal disregard will not excuse their omission." The T. J. Hooper, 60 F.2d 737, 740 (2d Cir.), cert. denied sub nom. Eastern Transportation Co. v. Northern Barge Corp., 287 U.S. 662, 53 S.Ct. 220, 77 L.Ed. 571 (1932); Coleman v. Jahncke Service, Inc., 341 F.2d 956, 959, rehearing denied, 348 F.2d 868 (5th Cir. 1965), cert. dismissed sub nom. Jahncke Service, Inc. v. Greater New Orleans Expressway Commission, 382 U.S. 967, 86 S.Ct. 525, 15 L.Ed.2d 463 (1966).

[6] Violation of the 100-ft. rule amounted to statutory fault[37] requiring the petitioners MSTC and MTL to show that this violation "not merely * * * might not have been one of the causes, or that it probably was not, but that it could not have been." The Pennsylvania, 86 U.S. (19 Wall.) 125, 136, 22 L.Ed. 148 (1873). See Waterman Steamship Corp. v. Gay Cottons, 414 F.2d 724, 737 (9th Cir. 1969). This MSTC and MTL have failed to do, and they are therefore not entitled to exoneration from liability. The rule with respect to the spacing of bulkheads is aimed, among other things, at minimizing the effect of racking stresses. The court finds that the replacement of the mine original T-2 transverse bulkheads with the one at frame 59 and with the diaphragm plates substantially weakened the *Queen's* ability to cope with racking stresses which result from working in a heavy sea like the one in the Gulf of Mexico on February 3-4, 1963.

[7] The court further finds that both MSTC and MTL were well aware of the specifics of the conversion plan,[38] including the number and spacing of bulkheads, and that they were thus privy to, and knew of, the non-adherence to the 100-ft. rule. This was pointed out, in effect, to MTL by its consultants —Sharp & Co.—in the letter of May 17, 1960. MSTC and MTL are therefore not entitled to limitation of liability.

II. --

[8, 9] MSTC and MTL had an absolute duty to furnish a vessel reason-

35. See supra n. 13.

36. The only apparent reason for the decision not to employ at least three complete bulkheads was the heretofore mentioned one of economy of cost and a desire to maximize cargo capacity. Cf. Sharp Co. letter, supra n. 11.

37. Cf. Belden v. Chase, 150 U.S. 674, 698, 14 S.Ct. 264, 37 L.Ed. 1218 (1893); Commercial Transport Corporation v. Martin Oil Service, Inc., 374 F.2d 813, 819 (7th Cir. 1967).

38. MTL, which acted as MSTC's "agent" during the period of the conversion, assigned its Assistant to the President in Charge of Engineering, Robert F. Rae, to oversee the operation. Rae in turn assigned port engineer Raymond McGraw to be present at Bethlehem's shipyard throughout the conversion process.

ably fit for its intended use. "The standard is not perfection, but reasonable fitness; not a ship that will weather every conceivable storm or withstand every imaginable peril of the sea, but a vessel reasonably suitable for her intended service." Mitchell v. Trawler Racer, Inc., 362 U.S. 539, 550, 80 S.Ct. 926, 933, 4 L.Ed.2d 941 (1960). However, MSTC and MTL did not live up to their absolute duty. Perhaps the clearest indictment of the design of the MSQ is the Marine Board of Investigation's following recommendation:

> In the future, the same conversion of another T-2 type tanker should not be approved. Further, it is recommended that no other conversion of this type vessel should be approved which deviates from the originally designed features for the carriage of normal petroleum products.[39]

"The subsidiary questions leading to ultimate conclusion of seaworthiness are • • • what is the vessel to do? What are the hazards, the perils, the forces likely to be incurred? Is the vessel or the particular fitting under scrutiny, sufficient to withstand those anticipated forces? If the answer is in the affirmative, the vessel (or its fitting) is seaworthy. If the answer is in the negative, then the vessel (or the fitting) is unseaworthy no matter how diligent, careful, or prudent the owner might have been." Walker v. Harris, 335 F.2d 185, 191 (5th Cir.), cert. denied, 379 U.S. 930, 85 S.Ct. 326, 13 L.Ed.2d 342 (1964). The answer herein is clearly negative; the court finds that the *Queen* was intrinsically unseaworthy[40] and not reasonably suitable for her intended service. The standard for the transverse strength of a T-2 tanker is, of course, a standard T-2. The primary transverse members of such a ship are the transverse bulkheads and web frames. One expert calculated that removal of the nine bulkheads resulted in an initial transverse bulkhead area reduction of 69.33 percent. Web area reduction, according to his figures, amounted to 88.71 percent.[41] Allowing full credit for the new bulkhead at frame 59 and the diaphragm plates installed at frames 53 and 65, he calculated the total area reduction of transverse members to be 43.7 percent.[42] The court finds that this reduction in the total area of the transverse members resulted in a very substantial weakening of the transverse strength of the original hull of the MSQ. In addition, the court finds that the cargo tank and the diaphragm bulkheads added little, if anything, to the transverse strength of the vessel.[43]

39. Claimants' Exhibit 24, p. 37. The Commandant concurred in the recommendation that the same conversion not be approved again, but he ruled that the further recommendation regarding any deviation from the original design features required "considerable qualification." See Claimants' Exhibit 25 at p. 6.

40. The MSQ was unseaworthy in a number of respects: While provision was made for longitudinal expansion of the cargo tank, there was no provision for transverse and vertical thermal expansion and the stresses resulting therefrom. The concentration of the entire weight of the cargo within approximately fifteen feet on either side of the centerline of a vessel originally designed for even cargo distribution throughout the spaces, port to starboard, reduced the ship's radius of gyration, and its period of roll was therefore faster than another vessel with the same metacentric height. Corrosive (and conceivably explosive) solid sulphur ranging in texture from fine dust particles to solid chunk coated most of the interior of the vessel surrounding the cargo tank. There was no adequate system for warning the crew of the presence of toxic and potentially explosive mixtures of hydrogen sulphide and carbon disulphide within both the cargo tank and the void spaces. The 6-in. and 4-in. vents for venting off these gases from the surface of the molten sulphur were ineffective on the ill-fated voyage as a result of filling the sub-tanks into the expansion trunks.

41. See Trial Minutes, p. 851.

42. See *id.* at 858.

43. Concentration of the entire cargo within a transverse distance of less than half of the beam of the ship did not serve to lessen the shear stress on the bottom trans-

The petitioners make much of the fact that the *Queen* was constantly attended and scrutinized by a "host of individuals," including officers of MTL, marine superintendents, port engineers and various technicians, as well as inspectors from the Coast Guard and ABS.[44] Of course, the attendance of a number of these people (e. g. the Coast Guard inspectors) was statutorily required from time to time. But the very fact that MTL, for example, required the continuing presence of technicians implies, in itself, the uniqueness of the MSQ's design and the concern for its performance. The short history of the vessel shows that it was prone to fires,[45] for one thing.

[10] The petitioners and impleaded respondents speculate that the *Queen* fell victim to a "freak sea" or to the weather in the Gulf of Mexico on February 4, 1963, which they argue represented a peril of the sea. The court specifically rejects the conjecture regarding a freak sea. There is no evidence whatsoever before the court indicating that other ships in the Gulf at the same time as the MSQ experienced such wave formation(s). As for the weather during the early hours of February 4th, the court finds that strong winds and rough northerly seas existed, but that this condition was by no means extraordinary,[46] nor did it represent a situation which a seaworthy ship could not have been reasonably expected to weather. Indeed, some 24 ships reporting weather observations for that date to the Weather Bureau apparently did cope with the conditions.[47] The vessel Texas Gulf Sulphur No. 1—a smaller liberty ship also converted to transport molten sulphur, albeit with four complete transverse bulkheads—managed to sail high and light to Houston, Texas along a course somewhat paralleling (in the opposite direction) the probable one of the *Queen*.[48] The Smooth Deck Log Book of the Texas Gulf Sulphur No. 1 lists winds ranging in force from 6–7–8 on the Beaufort scale during the period of time 0100–1200 hours on February 4th.[49] The vessel's master, Bjorneby, testified, however, that these ratings were just estimates,[50] although they are essentially in conformity with those of the hindcast. Captain Bjorneby also testified that he had sailed through such winds many times, including the voyage in point, without suffering any damage.[51] He indicated that the obviously desirable condition for experiencing such weather was laden [like the *Queen*] rather than light.[52]

The petitioners argue that, in view of the prevailing weather conditions, it is quite likely that capsizing brought about the sudden loss of the MSQ.[53] There is logic in this conjecture when one considers the weather factor along with the fact that a distress signal can often be transmitted within a matter of seconds. However, even if capsizing were the actual cause of the disaster, *although the court makes no such finding*, such an occurrence would be attributable to the unseaworthy condition created by the conversion concentration of cargo within some 15 feet on either side of the centerline which effected a reduction of the original period of roll of 12.1 seconds for a T–2 hull to 8.5 seconds for the *Queen*. The calculated period of waves was within ten percent of this converted period of roll.

verse webs, which had been cut down to accommodate the cargo tank in the first place.

44. See generally Petitioners' Post-Trial Brief, pp. 12–28.

45. See Claimants' Exhibit 24, pp. 9–10.

46. It seems unlikely that a member of the crew of the MSQ would send a personal radio message at 1:25 a. m. if the ship were experiencing a raging storm.

47. Cf. Claimants' Exhibit 336.

48. See Petitioners' Exhibit 1.

49. See Petitioners' Exhibit 28.

50. Trial Minutes, p. 1316.

51. *Id.* at 1314–15.

52. See *id.* at 1310.

53. Petitioners' Post-Trial Brief, p. 33.

Then again, a conclusion the logic of which is more compelling in view of all the known facts is that the MSQ suffered a sudden and massive structural collapse. But be that as it may, this court concurs in the repeated representation of Bethlehem that no one knows *how* the ship was lost.

In a case involving the unexplained loss of a fishing boat, the Court of Appeals for the Ninth Circuit affirmed the trial court's conclusion that "[t]here is no presumption of unseaworthiness of the vessel since there [was] no evidence indicating either negligence or unseaworthiness * * * at or prior to the time of the loss." Walston v. Lambertsen, 349 F.2d 660, 661 (9th Cir. 1965), cert. denied, 382 U.S. 980, 86 S.Ct. 553, 15 L.Ed.2d 470 (1966). Relying on Admiral Towing Co. v. Wooten,[54] the Court in *Walston* expounded the nature of the permissible presumption in a case like this as follows: "* * * if a claimant establishes that a vessel is unseaworthy, the trial court may presume that the unseaworthiness was the proximate cause of the sinking, otherwise unexplained, of a vessel in calm seas. * * * [This] presumption * * * has been indulged only when the claimant has been able to establish to the satisfaction of the trial court that the vessel was unseaworthy at the time it departed on its last voyage."[55] 349 F.2d at 662.

The rule in this Second Circuit permits the presumption of causation. It may also encompass the existence of unseaworthiness[56] as well. See Federazione Italiana Dei Consorzi Agrari v. Mandask Compania De Vapores, S.A. [hereinafter "The Perama"], 388 F.2d 434 (2d Cir.), cert. denied, 393 U.S. 828, 89 S.Ct. 92, 21 L.Ed.2d 99 (1968); South, Inc. v. Moran Towing & Transportation Co. [hereinafter "The Vega"], 360 F.2d 1002 (2d Cir. 1966).

[11] While the losses of the Perama and Vega and the boat in *Walston* all occurred during fair weather and calm seas, this court is aware of no valid reason for not applying the same rule herein where the MSQ was lost under conditions which the court finds a seaworthy vessel should have been reasonably expected to weather. Cf. Walker v. Harris, 335 F.2d at 193; Brinegar v. San Ore Construction Company, 302 F.Supp 630, 634 (E.D.Ark.1969).

[12] The presumption of causation is rebuttable and therefore operates in the same manner as the *Pennsylvania* Rule. That is, if and when claimants prove that a particular ship was unseaworthy when she last broke ground, which is clearly the case here, the owner or party seeking to avoid liability can rebut the presumption by showing that the unseaworthiness could not have caused the loss. Here again, the court finds that MSTC and MTL not only failed to rebut the presumption, but they also were unable to show that they were not privy to, or knowledgeable of, the unseaworthiness of the *Queen*.

Thus, in addition to, and independent of, the court's conclusion that the petitioners MSTC and MTL are not entitled to exoneration from, or limitation of, liability on the basis of the statutory fault, the court hereby concludes that the two petitioners are not entitled to exoneration or limitation as a result of the proven unseaworthiness of the MSQ.

III.

A minimum cargo capacity of 15,100 long tons of molten sulphur had been the

54. 290 F.2d 641 (9th Cir. 1961).

55. The underlying policy for this rule was stated as follows:
> The sea itself contains many hazards, and an inference of liability of the shipowner for the mysterious loss of his vessel should not be lightly drawn. (footnote omitted) 349 F.2d at 662.

56. For a case involving the unexplained loss of a ship where the trial court clearly presumed that the vessel was unseaworthy and that the loss was caused by this unseaworthiness, see Martin & Robertson, Ltd. v. The Steamship Barcelona, 1968 A.M.C. 331 (S.D.Fla.1967).

uncompromising requirement for the conversion of the Esso New Haven. The master of the *Queen* was issued a temporary stability letter[57] and "Preliminary Trim, Stability & Loading Stress Booklet,"[58] approved by the Coast Guard on January 19, 1961 pursuant to 46 C.F.R. § 31.10–30(d) (2). The Booklet listed an optimum cargo tonnage of 15,211 long tons based on 20.08 cubic feet of molten sulphur per ton at 275° F. Full load displacement was calculated to be 21,980 tons, with a full load draft of 30 feet, 3 inches. The cargo tonnage figure of 15,211 was exceeded on no less than 45 of the 64 voyages of the MSQ, including the ill-fated sixty-fourth.[59]

Both the temporary stability letter and Stress Booklet stated that a sagging (or hogging) numeral in excess of 100 was not authorized. Nevertheless, calculations for the last 60 voyages of the MSQ (for which printed Port Log-Vessel Reports were used) indicate that, while loaded, the sagging numeral for the vessel exceeded 100 on 52 occasions, varying from 100.55 to 104.66. The hogging numeral on all fully loaded voyages varied from 47.63 and 55.01. The calculated stress numerals at the time of departure from Beaumont on February 2, 1963 were 54.37 in hog and 101.01 in sag.

According to the figures contained in the Vessel Report, the *Queen* had a mean draft in fresh water at that departure of 31 feet, 4 inches. The equivalent salt water mean draft was 30 feet, 8 inches.

[13] The MSQ was by definition in "coastwise" operation. See 46 U.S.C. § 88. Under the coastwise rules for loading, the ship was some three inches above her marks when she last broke ground on February 2nd, and the court thus finds that her loading did not amount to a statutory violation,[60] although she was clearly loaded more than to the gills on that date—i.e. into the expansion trunks.

[14] The court concludes, however, that the disregard of the optimum tonnage figure[61] set forth in the Stress Booklet on the *Queen*'s last voyage (and on 44 previous voyages) amounted to gross negligence on the part of MTL in view of the unique design of the vessel. To have instigated this design with a cargo capacity requirement of 15,100 long tons and then to have continually exceeded the optimum figure, which was 111 tons in excess of this requirement to begin with, is incomprehensible except in terms of *unacceptable* economic considerations.[62] MTL, as bareboat charterer, certainly cannot be heard to argue that it was unaware of, and therefore not responsible for, MSQ loading practices. Cf. Coryell v. Phipps, 317 U.S. 406, 410, 63 S.Ct. 291, 87 L.Ed. 363 (1943). Its representatives kept a continuing eye on the vessel's operation, and the Vessel Reports, including the one for the last voyage, were generally stamped "received" by MTL within several days of departure from Beaumont.

57. Petitioners' Exhibit 22.

58. Petitioners' Exhibit 21.

59. See the Port Log-Vessel Reports of the MSQ, Petitioners' Exhibit 19.

60. However, the court notes that the vessel was some five inches below her international marks.

61. Even the ship's temperature-corrected tonnage figure of 15,240 was in excess of the optimum figure. See Vessel Report for Voyage No. 64 in Petitioners' Exhibit 19. Moreover, the base ship's figure of 15,200 long tons for February 2, 1963 had been exceeded on only three previous voyages, to wit, the 12th, 16th and 57th.

62. As Judge Weinfeld has so aptly pointed out:

> This Court is unaware of any current authority or doctrine in general maritime law which shifts to the [crew] the burden of the hazards created by the shipowner's endeavors, experimental or otherwise, to increase the productive earning power of his vessel • • • Rodriguez v. Coastal Ship Corporation, 210 F.Supp. 38, 42 (S.D.N.Y.1962).

[15] Contrary to the argument of the petitioners,[63] the court finds that the death claimants did not abandon their claims under the Jones Act, nor were they required to do so. See Doyle v. Albatross Tanker Corp., 367 F.2d 465, 467 (2d Cir. 1966). The Jones Act, of course, created a federal right of action for the wrongful death of a seaman based on the Federal Employers' Liability Act which allows recovery for death resulting "in whole or in part" from negligence. 45 U.S.C. § 51. See, e.g., Ferguson v. Moore-McCormack Lines, Inc., 352 U.S. 521, 523, 77 S.Ct. 457, 1 L.Ed.2d 511 (1957). In order to recover, a claimant is not required to prove common-law proximate causation. Crane v. Cedar Rapids & Iowa City Railway Co., 395 U.S. 164, 166, 89 S.Ct. 1706, 23 L.Ed. 2d 176 (1969); Rogers v. Missouri Pacific Railroad Co., 352 U.S. 500, 506, 77 S.Ct. 443, 1 L.Ed.2d 493, rehearing denied, 353 U.S. 943, 77 S.Ct. 808, 1 L.Ed. 2d 754 (1957). The Court of Appeals for the First Circuit interpreted *Rogers* as meaning that "only the barest possibility of causation is enough to make out a case for the jury." New York, New Haven & Hartford Railroad Company v. Henagan, 272 F.2d 153, 157–158 (1st Cir. 1959). Despite the Supreme Court's reversal of *Henagan* on the basis of the trial record,[64] the Court of Appeals's assessment of the causation standard for FELA-Jones Act cases has certainly proven perspicacious. See generally 98 A.L.R.2d 653–683; Prosser, Law of Torts 560–561 (3d ed. 1964).

In a Jones Act action based on the negligent loading of the M/V Wingate, the subsequent loss of which "being otherwise unexplained," the Fifth Circuit Court of Appeals reversed the trial court's directed verdict for the defendants, finding that the jury could have inferred that the loss of the vessel and crew was due to the negligent loading. Roth v. Bird, 239 F.2d 257, 262 (5th Cir. 1956). See Roth v. Cox, 210 F.2d 76 (5th Cir. 1954). The Ninth Circuit relied on *Roth* and Schulz v. Pennsylvania Railroad Co.[65] in affirming the trial court's denial of a petition for limitation of liability in a Jones Act action sounding in negligence for the disappearance of a tugboat. Admiral Towing Company v. Woolen, supra. See especially 290 F. 2d at 649–652. The Court concluded that:

> * * * the requirement of legal cause can be supplied by inference when, as here, there is negligence and/or unseaworthiness on the one hand and an unexplained disappearance of a vessel at sea on the other.[66]

[16–19] The absolute duty of an owner (or bareboat charterer) to furnish a seaworthy ship is "completely independ-

63. Compare Petitioners' Post-Trial Brief, p. 50, with Death Claimants' Reply Memorandum, p. 2.

64. 364 U.S. 441, 81 S.Ct. 198, 5 L.Ed. 2d 183 (1960).

65. 350 U.S. 523, 76 S.Ct. 608, 100 L.Ed. 668 (1956).

66. 290 F.2d at 652. Cf. Petition of Risdal & Anderson, Inc., 248 F.Supp. 928 (D. Mass.1966).

> Often at least the nature of airplane (and ship) losses is known as a result of a combination of factors including electronic surveillance, possibly eye witnesses and/or survivors and wreckages, and the only thing subject to inference is causation. A good example of such a case is Montgomery v. Goodyear Aircraft Corporation, 302 F.2d 777 (2d Cir.), cert. denied, 393 U.S. 841, 89 S.Ct. 121, 21 L.Ed. 2d 112 (1968). The Court of Appeals in this Circuit has concluded:
>
> > Th[e] inability to explain the precise cause of an airplane crash is not a rarity in cases where the members of the crew—who would have been most familiar with the tragic events—have perished. In such instances, the court is required to reconstruct the events leading to the crash from the available evidence (often the silent charred wreckage) and from the reasonable inferences to be drawn from such evidence. We do not blink at the obvious when we say that conclusions thus grounded can never be proven with mathematical exactitude.
>
> Ingham v. Eastern Air Lines, Inc., 373 F.2d 227, 240 (2d Cir.), cert. denied, United States v. Ingham, 389 U.S. 931, 88 S.Ct. 295, 19 L.Ed.2d 292 (1967).

ent of his duty under the Jones Act to exercise reasonable care." Mitchell v. Trawler Racer, Inc., 362 U.S. at 549, 80 S.Ct. at 932. However, breach of the latter duty can aggravate, or lead to, a breach of the former. In view of this and the fact that furnishing a ship which is unseaworthy raises a rebuttable presumption of causation in a case like this, a similar presumption must also arise with regard to negligence. Rebuttal requires a showing that the negligence could not have contributed to the loss of the vessel. *Cf.* Manning v. M/V "Sea Road", 417 F.2d 603, 610 (5th Cir. 1969). This is, of course, the same test applied to a situation where a ship's loading amounts to a statutory violation (which was avoided in this case only because of the "coastwise" loadline increment). See, e. g., Petition of Long, supra. But be that as it may, MTL has not been able to prove that its loading of the *Queen* on her last voyage could not have contributed to her demise, especially in view of the intrinsic structural weakness. The Jones Act claims are therefore allowed against MTL.

IV.

[20] Bethlehem's generally excellent trial brief begins, however, with the following non sequitur: "[I]t is difficult to conceive that Bethlehem can be held to have performed its duties in an unreasonable manner in light of the studies and views made and expressed not only by Bethlehem itself but by the owner, the charterer, the user and the two regulatory bodies who are charged with the responsibility and power to ensure the safety and seaworthiness of the American merchant marine. * * *"[67] But Bethlehem and the owner, charterer and user were all in the same boat with regard to the design of the MSQ. Only those few mortals of the ABS actually stood between whatever design Bethlehem settled on and the rubber stamp of the Coast Guard. Clearly unimpressed at first, the ABS finally succumbed to Bethlehem's "basic approach." To have done so was wrong. But the failure of the Coast Guard and the ABS to live up to their duty to promote the safety of life and property at sea in no way relieves a shipbuilder of *its* duty to exercise reasonable care in designing and carrying out the conversion of a ship, and the court finds that to have gutted a 16-yr. old tanker of the structurally unreliable T-2 class and then restructured it in disregard of the generally recognized rule for the maximum spacing of complete transverse bulkheads which Bethlehem had previously *never* exceeded[68] was negligence on the part of Bethlehem. "If the nature of a thing is such that it is reasonably certain to place life and limb in peril when negligently made, it is then a thing of danger," and "the manufacturer of this thing of danger is under a duty to make it carefully." MacPherson v. Buick Motor Co., 217 N.Y. 382, 389, 111 N.E. 1050, 1053 (1916). See generally Arnott, Design and Construction of Steel Merchant Ships 55-56 (1955). The court further finds that Bethlehem was negligent in designing the conversion in such a way as to concentrate the entire weight of the cargo within fifteen feet on either side of the centerline, thereby significantly reducing the ship's radius of gyration, as well as tending to increase shear stress on the reduced transverse web frames. Bethlehem was also negligent for not having provided for transverse and vertical thermal expansion of the cargo tank.

Bethlehem's role of designing the conversion and then providing all the labor and materials necessary to carry it out was typical for a shipyard. While Bethlehem may not have laid the keel, the court finds that it launched essentially a "new" ship in view of the uniqueness of the design and the significant alter-

67. Trial Memorandum on Behalf of Impleaded Defendant Bethlehem Steel Corporation [hereinafter "Bethlehem Brief"], pp. 1-2.

68. See Trial Minutes, p. 2008.

ation of both the structure and purpose of the vessel. Sales are, of course, the usual means by which products enter commerce, but products liability, which encompasses users, arises not only as a result of such sales, but also "where a manufacturer has placed a defective article in the stream of commerce by other means." Delaney v. Towmotor Corporation, 339 F.2d 4, 6 (2d Cir. 1964). Cf. Deveny v. Rheem Manufacturing Company, 319 F.2d 124, 130 (2d Cir. 1963).

[21, 22] The question of the most desirable nomenclature for the manufacturer's liability for defective products—be it "breach of implied warranty"[69] a la the landmark decision of Henningsen v. Bloomfield Motors, Inc., 32 N.J. 358, 161 A.2d 69 (1960), or "strict liability" as enunciated, for example, in Section 402A of the Restatement (Second) of Torts—is far from settled.[70] See, e.g., Goldberg v. Kollsman Instrument Corporation, 12 N.Y.2d 432, 437, 240 N.Y.S. 2d 592, 595, 191 N.E.2d 81, 83 (1963); Rasko v. Sterling Drug, Inc., 416 F.2d 417, 424–429 (2d Cir. 1969). What is settled in this Court, however, is that an action based on such liability does lie in admiralty and under the Death on the High Seas Act. See Krause v. Sud-Aviation, Societe Nationale de Constructions Aeronautiques, 301 F.Supp 513 (S.D.N.Y. 1968); Sevits v. McKiernan-Terry Corporation, 264 F.Supp. 810 (S.D.N.Y. 1966); Montgomery v. Goodyear Tire & Rubber Company, 231 F.Supp. 447 (S.D.N.Y.1964); Middleton v. United Aircraft Corporation, 204 F.Supp. 856 (S.D.N.Y.1960). The nature of the duty which a manufacturer must live up to is also quite well settled. Section 398 of the Restatement (Second) of Torts, for example, sets forth the duty as follows:

> A manufacturer of a chattel made under a plan or design which makes it dangerous for the uses for which it is manufactured is subject to liability to others whom he should expect to use the chattel or to be endangered by its probable use for physical harm caused by his failure to exercise reasonable care in the adoption of a safe plan or design.

Bethlehem considered its duty as extending to "converting a tanker reasonably safe for its intended use, one which contained no defects. * * *"[71] Of course, this duty to provide a ship free from latent defects and concealed dangers and reasonably fit for its intended use—which the court finds is related to, but not dependent on, the shipbuilder's initial duty to exercise reasonable care in designing and building (or converting) a ship—does not require a shipbuilder to make a ship accident proof. See, e.g., Campo v. Scofield, 301 N.Y. 468, 472, 95 N.E.2d 802, 804 (1950). See also Mitchell v. Trawler Racer, Inc., supra.

[23] The court finds that Bethlehem, as a result of its negligence in designing the conversion, did *not* provide a ship free from latent and dangerous defects. The court refers, of course, once again primarily to the lack of a sufficient number of complete transverse bulkheads and the placement of the cargo tank vis-a-vis the breach of the hull—defects which the court has found rendered the Queen intrinsically unseaworthy. The court further finds, in view of the fact that Bethlehem designed and carried out the conversion at the behest of MTL and MSTC which were well aware of the

68. Bethlehem does not seriously dispute the existence in this case of an implied warranty of fitness and suitability for the MSQ's intended use. See Bethlehem Brief, pp. 35-41.

70. Judge Eschbach and Professor Kessler have done much, however, to place the theories in perspective. See Bills v. Massey-Ferguson, Inc., 296 F.Supp. 776 (N.D.Ind.1969); Greene v. Clark Equipment Company, 227 F.Supp. 427 (N.D. Ind.1963); Kessler, Products Liability, 76 Yale L.J. 887 (1967).

71. Bethlehem Brief, p. 23.

Plan and in agreement therewith, that these three corporations were in pari delicto in this case. The court therefore concludes that justice and logic require that the presumption of causation set forth in *Wolston* and *The Perama* and *The Vego* also be applied to Bethlehem. And Bethlehem has had no more success than MTL and MSTC in convincing this court that the heretofore mentioned serious defects could not have caused the demise of the MSQ. Cf. Rooney v. S. S. Healy Co., 20 N.Y.2d 42, 281 N.Y.S.2d 321, 228 N.E.2d 383 (1967), and the subsequent decisions in Guarino v. Mine Safety Appliances Company, 31 A.D.2d 284, 297 N.Y.S.2d 639 (2d Dep't), aff'd, 25 N.Y.2d 460, 306 N.Y.S.2d 942, 255 N.E.2d 173 (1969). The wrongful death claims are therefore allowed against impleaded respondent Bethlehem.[71]

V.

[24] Clause 16A of the open insurance policy dated May 1, 1957 between TGS and FIC reads, in pertinent part:

> These Assurers hereby agree to waive all rights of subrogation against the steamer and/or the Assured and/or affiliated and/or associated and/or allied companies and/or corporations in the event that the carrying steamer is owned and/or chartered and/or operated by the Assured and/or affiliated and/or associated and/or allied companies and/or corporations.

The court interprets this clause as meaning that FIC waives subrogation wherever the stipulated relationship(s) exist. The court finds, however, that none of these relationships were present in this case.

[25] As already noted above, TGS was not a joint venturer with MTL (and MSTC), nor is there any evidence before the court indicating that TGS was "affiliated and/or associated and/or allied" with either of those two corporations. The relationship between TGS and MTL was a simple and arm's-length contractual one as evidenced by the charter party. Not even this contractual relationship existed between TGS and MSTC.

In arguing that the requisite affiliation and/or association did exist in this case, MTL and MSTC refer the court to Old Colony Insurance Company v. Jeffery's Mill & Warehouse, Inc., 146 F. Supp. 277 (N.D.Cal.1956). But that case, which also involved a contested waiver of subrogation clause, makes it abundantly clear that the type of business relationship contemplated in a clause like 16A was not present herein. The court listed 16 findings which led it to conclude that "the intimate arrangements between the two concerns were such that [the assured] was, for all practical purposes, if not in complete fact, placed in control of the defendant." 146 F.Supp. at 280. MTL and MSTC also rely on Great American Insurance Company, N. Y. v. Gulf Marine Drilling No. 1, 302 F.2d 332 (5th Cir. 1962). In that case, however, the Court merely held that the defendant was at least operating with one of the three assureds, if not

71. While Bethlehem's liability herein is clear, the court finds that TGS is not liable for the wrongful deaths. It is true that TGS knew of the conversion design, closely followed its implementation and provided technical advice with regard to the nature of molten sulphur. But the role of TGS was essentially that of a spectator with a purely cargo-oriented interest. The court finds that TGS was not a joint venturer with MTL and MSTC because it did not have a stake in the ownership of the MSQ. See Petitioners' Exhibit 27 at p. 45. The death claims against TGS as impleaded respondent are therefore dismissed.

The status of TGS in this case is substantially dissimilar to that alleged on the part of the Union Oil Company in the Torrey Canyon disaster. See generally In re Barracuda Tanker Corporation, 281 F.Supp. 228 (S.D.N.Y.1968). TGS was clearly only a time charterer herein and therefore not entitled to petition for exoneration or limitation pursuant to 46 U.S.C. § 183 *et seq.* See In re Barracuda Tanker Corporation, 409 F. 2d 1013 (2d Cir. 1969). TGS's petition is therefore dismissed, and the claims asserted against it therein are also dismissed for the reasons stated above.

more, within the language of the subrogation waiver. See 302 F.2d at 334.

[26, 27] In reference to the essential condition of Clause 16A, namely, "steamer * * * owned and/or chartered and/or operated," it is clear that the MSQ was not owned or operated by TGS. Indeed, MTL and MSTC do not argue otherwise. Furthermore, the court concludes that the only sensible interpretation of the word "chartered", read in the context (and juxtaposition) of both the condition and clause as a whole, is that it really means *demise* or *bareboat* chartered. Cf. The Seatrain-Havana, 103 F.2d 772 (2d Cir.), cert. denied sub nom. Conners Marine Co. v. American Molasses Co., 308 U.S. 580, 60 S.Ct. 98, 84 L.Ed. 486 (1939). Stated another way, there must be the equivalent of ownership of the given steamship, if only pro hac vice on the part of the assured, before subrogation of the assurer's claim against the vessel would be waived. A voyage, or better, time charter like the one herein, for example, does not confer responsibility on the charterer for the manning, victualling, navigation and maintenance of the vessel —that is, the control of a ship upon which liability for the loss or damage of a cargo is predicated. The court thus concludes in this case that neither the Queen, nor its operator MTL (or owner MSTC) fell within the purview of Clause 16A of the open policy between TGS and FIC, and there was therefore no waiver of subrogation herein.[73]

The bill of lading in this case provided for coverage by Cogsa, which requires a carrier to exercise due diligence, before and at the beginning of a voyage, to make its ship seaworthy, properly equip it and make the holds and all other parts of the vessel in which goods are carried fit and safe for their reception, carriage, and preservation. 46 U.S.C. § 1303(1).

> Neither the carrier nor the ship shall be liable for loss or damage arising or resulting from unseaworthiness unless caused by want of due diligence on the part of the carrier to make the ship seaworthy, and to secure that the ship is properly * * * equipped * * * and to make the holds * * and all other parts of the ship in which goods are carried fit and safe for their reception, carriage, and preservation * * *.[74]

[28-32] In a case like this where it has been proven that the ship was unseaworthy when it last broke ground, there is a presumption that the cargo was lost as a result of this unseaworthiness, and the party (or parties) seeking to avoid liability can only do so by showing that the requisite due diligence was exercised or that the loss was the result of one or more of the "uncontrollable causes"[75] set forth in Cogsa. See The Perama, 302 F.2d at 436. The court finds that MTL and MSTC have failed to sustain their burden of proving that they exercised due diligence to make the MSQ seaworthy or that the loss of the cargo

73. Cargo underwriter Charles Oerding testified that the premium payable by TGS under the open policy was 3½ cents per $100 whenever there was no waiver of subrogation and that the rate for such a waiver was 5 cents per $100. See Trial Minutes, pp. 1251, 1264. Oerding further testified that the rate payable for the last voyage of the MSQ was .035— i. e. 3½ cents. See Trial Minutes, p. 1263. See also *id.* at 1249, lines 9-14.

The subrogation receipt given by TGS to FIC at the time of indemnification further substantiates the fact that there was no waiver in this case.

FIC argues in the alternative, however, that even if the Clause 16A waiver were operative, FIC became a subrogee as a result of TGS's assignment to FIC of its claim as evidenced by the subrogation receipt. However, in view of its determination above, this court need not specifically determine this issue, although it is questionable whether an operative waiver would inure in this Circuit to the benefit of MTL (or possibly MSTC) in the first place. See The Seatrain-Havana, 103 F.2d at 774.

74. 46 U.S.C. § 1304(1).

75. See 46 U.S.C. § 1304(2). See also Petitioners' Exhibit 17, el. 22.

was the result of an excepted cause. MTL and MSTC, having been privy to, and knowledgeable of, the unseaworthy design of the MSQ, are not entitled to limitation of liability. The claim of FIC is therefore allowed against both MTL and MSTC.[34]

* * *

[33] In summarizing the foregoing in reference to the various questions raised in the Pre-Trial Order, the court has concluded that the petitioners MSTC and MTL are not entitled to exoneration from, or limitation of, liability, and their petition is therefore denied. On the other hand, as a time charterer, TGS was not entitled under the Limitation of Liability Act to petition for exoneration or limitation, and its petition is therefore dismissed.

The claims arising under the Death on the High Seas Act are allowed as against MTL and MSTC and impleaded respondent Bethlehem, but they are dismissed as against petitioner-impleaded respondent TGS. The claims arising under the Jones Act are allowed as against MTL. The claim arising under Cogsa is allowed as against MTL and MSTC.

All motions, decision of which was reserved at the time of trial, are hereby denied in conformity with this opinion, which represents the court's findings of fact and conclusions of law pursuant to Rule 52(a) of the Federal Rules of Civil Procedure.

[34] With regard to the question of damages, the evidence in this case does not justify any assessment of punitive damages. Trial of the sole remaining issue of compensatory damages will proceed as soon as counsel can be heard.

Settle an order within ten days.

Judgment of the United States Court of Appeals.

UNITED STATES COURT OF APPEALS,
FOR THE
SECOND CIRCUIT.

35228, 35233, 35235, 35247

At a Stated Term of the United States Court of Appeals, in and for the Second Circuit, held at the United States Courthouse in the City of New York, on the twenty-fifth day of April, one thousand nine hundred and seventy-two.

Present: HON. HENRY J. FRIENDLY,
Chief Judge,
HON. ROBERT P. ANDERSON,
Circuit Judge,
HON. DUDLEY B. BONSAL,
District Judge.

DOCKETED AS A JUDGEMENT 72,678 ON JUNE 28, 1972

In the Matter of the Vessel Marine Sulphur Queen
Marine Sulphur Transport Corporation,
As Owner, Appellant,
Marine Transport Lines, Inc.,
As Demise Charterer, Appellant,
Bethlehem Steel Corporation,
Impleaded Respondent-Appellant.
United States Fire Insurance Co.,
Cargo Claimant-Appellee and Appellant,
Ida Ruth Heard, et al.,
Death Claimants, Appellees.

Appeal from the United States District Court for the Southern District of New York.

Judgment of the United States Court of Appeals.

This cause came on to be heard on the transcript of record from the United States District Court for the Southern District of New York, and was argued by counsel.

On Consideration Whereof, it is now hereby ordered, adjudged, and decreed that the decree of said District Court be and it hereby is affirmed in part and reversed in part with costs to be taxed against appellants Marine Transport Lines, Inc., and Marine Sulphur Transport Corporation in favor of death claimants Ida Ruth Heard et al., and against said death claimants in favor of impleaded respondent-appellant Bethlehem Steel Corporation and against cargo claimant United States Fire Insurance in favor of Marine Sulphur Transport Corporation, Marine Transport Lines, Incorporated and Bethlehem Steel Corporation in accordance with the opinion of this court.

A. Daniel Fusaro,
Clerk

Order Denying Petition of United States Fire Insurance Co. for Rehearing.

35228, 35233, 35235, 35247

UNITED STATES COURT OF APPEALS,

SECOND CIRCUIT.

[SAME TITLE]

A petition for a rehearing having been filed herein by counsel for the appellant, United States Fire Insurance Co.,

Upon consideration thereof, it is
Ordered that said petition be and it hereby is denied.

May 23, 1972

Henry J. Friendly
HENRY J. FRIENDLY, Chief Judge

Robert P. Anderson
ROBERT P. ANDERSON, C.JJ.

Dudley B. Bonsal
DUDLEY B. BONSAL, District Judge

Order Denying Petition of Marine Sulphur Transport Corporation and Marine Transport Lines, Inc., for Rehearing.

35228, 35233, 35235, 35247

UNITED STATES COURT OF APPEALS,

SECOND CIRCUIT.

[SAME TITLE]

A petition for a rehearing having been filed herein by counsel for appellants, Marine Sulphur Transport Corporation and Marine Transport Lines, Inc.,

Upon consideration thereof, it is

Ordered that said petition be and it hereby is denied.

June 2, 1972

HENRY J. FRIENDLY
Henry J. Friendly, Chief Judge

ROBERT P. ANDERSON
Robert P. Anderson, U.S.C.JJ.

DUDLEY B. BONSAL
Dudley B. Bonsal, District Judge

Order Denying Petition of Marine Sulphur Transport Corporation and Marine Transport Lines, Inc. for Rehearing *in banc*.

35228, 35233, 35235, 35247

UNITED STATES COURT OF APPEALS,

SECOND CIRCUIT.

[SAME TITLE]

A petition for a rehearing containing a suggestion that the action be reheard in banc having been filed herein by counsel for appellants, Marine Sulphur Transport Corporation and Marine Transport Lines, Inc., and no active circuit judge having requested that a vote be taken on said suggestion,

Upon consideration thereof, it is

Ordered that said petition be and it hereby is denied.

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HENRY J. FRIENDLY, Chief Judge

June 2, 1972